BF V

B-F V

```
ggccccggga tgccgcggtt cgtgatcgtc gggtacgtgg acgacaaaat cttcggtacc   60
tacaacagta agagcaggac tgcacagcct atcgtggaga tgctgccgca ggaggaccag  120
gagcactggg acacgcagac ccagaaggcg cagggcggtg agcgggattt tgactggaac  180
ctgaacaggc tgccggaacg ctacaacaaa agtaaaggtg agcgtggggg aagctgcagc  240
gcgatgcgtc tgggacagga gctctgtgtg ccgagggtgt ccgccagccc cactgaggtg  300
tggccgtgcc ccacgcccag ctgtgctggg ccgtccatgt gtggtggcac tgtccctggg  360
ccgccctgct cctgcgccca cccaccccac cccagcctca tggcactcgc ggtgccccac  420
agccctagaa gcctctcacc tattactctg gctgtgcctc agggtctcac acgatgcaga  480
tgatgtttgg ctgtgacatc ctggaggacg gcagcatccg agggtacgat cagtatgcat  540
ttgatgggag ggacttcctt gcctttgata tggacacgat gacgttcacc gcggcggatc  600
cagtggctga aatcaccaag aggagatggg agacagaagg gacgtatgct gagagatgga  660
agcatgagct ggggactgtc tgtgttcaga acttgaggag atacctggag catgggaagg  720
cagcgctgaa aaggagaggt gaggatggga gggggacgtg gggctgggct gggtgtgggg  780
cagaggctca gtgtggggtg ctcagcccgg cccacaacgt cacccacctg cagtgcagcc  840
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gccccagcct ggtctcttct catggggtga gctggcagcg tggggcacgt ggggttggga 1140
ttcgcaggct gcccccttcct ttactgacaa cggcgctctc ctccagagcc gcagcccaac 1200
ctgattccca ttgtggcagg ggcggtcgtt gccatcgtgg ctgtcatcgc tgcggtcgtt 1260
ggatt                                                             1265
```

Figure 1

B-FVI

```
ggccccggga tgccgcggtt cgtgatcgtc gggtacgtgg acgacaaaat cttcggtatc   60
tacgacagta agagcaggac tgcacagccc atcgtggaga tgctgccgca ggaggaccag  120
gagcactggg acgcgcagac ccagaaggcc caggcggtg agcgggattt tgactggttc  180
ctgagcaggc tgccggaacg ctacaacaaa agtggaggtg agtgtggggg aagctgcagc  240
gcgatgcgtc tgggacagga gctctgtgtg ccgagggtgt ccgccagccc cactgaggtg  300
tggccatgcc ccacgcccag ctgtgctggg ccgtccatgt gtggtggcac tgtctctggg  360
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agcccaagaa gcctctcacc tatcactctg actgtgcctc agggtctcac acgatgcaga  480
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ttgatgggag ggacttcctt gcctttgata tggacacgat gacgttcacc gcggcggatc  600
cagtggcaga aatcaccaag aggagatggg agacagaagg gacgtatgct gagagatgga  660
agcatgagct ggggactgtc tgcgttcaga acttgaggag atacctggag catgggaagg  720
cggcagtgaa aaggagaggt gagaatggga gggagacgtg gggctgggct gggtgtgggg  780
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atttggggc cgccccttg tttactgaca acggtgctct cccccagagc cgcagcccaa 1200
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tgcatt                                                       1266
```

Figure 2

Genomic 8.4

```
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ggcgggtgag acccgacccc ccccggcccc ctcatgtccc accacccata tcgccccccc 300
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tgcgctttgg gggggacgcg gagacccctc ccgaacccgg cccggagccc gaagtcacct 540
tcaatgtcag cggtacgtgg ggacccccgt cactgtgctg tgcgcctcct ttatccccac 600
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tgtcccctcc atgtccccca gagaccccat tagccccaat agctcccaaa ctgtccccag 1020
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```

Figure 3a

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```

Figure 3b

B-FI

```
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```

Figure 4a
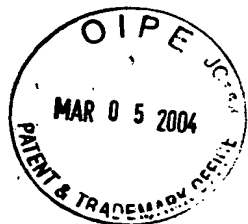
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tcccgcgctg agatcccatc acacccgggt acaaacatgc ggctttattc ccagttctgt 3660
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```

Figure 4b

12.1

```
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Figure 5a
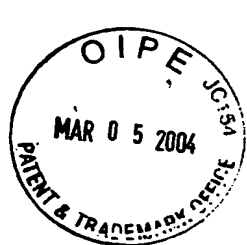
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Figure 5b

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Figure 5c

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Figure 5d

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Figure 5e
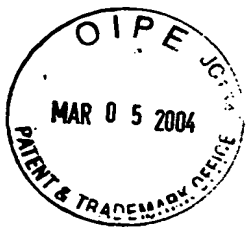
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Figure 5f

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Figure 5g

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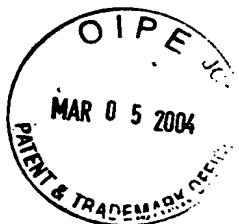
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Figure 5i

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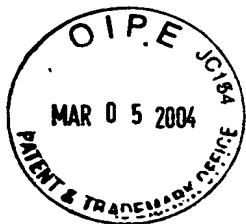
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Figure 5k

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Figure 5*l*

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Figure 5m

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Figure 5n

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Figure 5o

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tacttggagc cactatcgac tacgcgatca tggcgaccac acccgtcctg tggatctgcc 42600
tcgttggcct gccgcagttc ttcaacctcc cggcgcagct tttcgttctc aatttcagca 42660
tcccttтcgg cataccattt tatgacggcg gcagagtcat aaagcacctc attacccttg 42720
```

Figure 5p

```
ccaccgcctc gcagaacggg cattccctgt tcctgccagt tctgaatggt acggatactc 42780
gcaccgaaaa tgtcagccag ctgctttttg ttgacttcca ttgttcattc cacggacaaa 42840
aacagagaaa ggaaacgaca gaggccaaaa agctcgcttt cagcacctgt cgtttccttt 42900
cttttcagag ggtattttaa ataaaaacat taagttatga cgaagaagaa cggaaacgcc 42960
ttaaaccgga aaattttcat aaatagcgaa aacccgcgag gtcgccgccc cgtaacaagg 43020
cggatcgccg gaaaggaccc gcaaatgata ataattatca attgcatact atcgacggca 43080
ctgctgccag ataacaccac cggggaaaca ttccatcatg atggccgtgc ggacatagga 43140
agccagttca tccatcgctt tcttgtctgc tgccatttgc tttgtgacat ccagcgccgc 43200
acattcagca gcgttttca gcgcgttt                                      43228
```

Figure 5q

DM

```
gcacaaggaa atgcaaaggg gcatcactag gggacatggc acggggcatt ctagggagca 60
ttgcatgggg acattgcaaa ggaaatgcaa agggacattg catgggdaca ttgcaaacaa 120
attgagtggg agattgcacc gggatgttgc atggggacat tgcatggaat gtcccaccaa 180
ccaccctgca gggtgacact gggaccatcc ccagctctga ccatcccccc tttgctgcag 240
caccacccca ggtccgcatc gtccccatcc ccatctccaa cgaccccgac accgtccacc 300
tcatctgcca tgtttggggc ttctacccac ccgcagtgac catccagtgg ctgcacaacg 360
gcctcgtggt ggcctcaggt gacaccaaac tgctgcccaa cgggggactg gacctacagg 420
acacaggtgg ccctgagggc cagcattgca gcagggagca ctaaaacatg ttcagtgtgg 480
caattccagc ttggagcagc cgctgcagga ggattggagt gagtttgggg atggggatgt 540
ggcacccaca ccccacagtc ccccacggtt cattgtgccc cacgctgtcc ccacaggtcc 600
caatttgtcc ccggcgatga tggtgaaggt ggcagtggcg gccatggcgc tgacgttggg 660
gttggtggca ctcagcgccg gggttttcag cttctgtcag cggccacggg gtgagggatg 720
gggatgtggt gctggggaca tgtgtgacac cgagggtctg gtgtccagtg tggggtgtac 780
ctcctcattc atcatcttct gtgtggcagc tcctggcgct ggtcccagta ccccgtcctg 840
atgcgggttc tcactccaat cctggtcccc aaaatgatcc cggtccgagt tctggtcccc 900
atcccagtcc tggaccccat cccagtcctg gtccccattc tggtcttggt cctggtcctg 960
gttctgctcc tggtccctat ccctgactct ggtcccggtc cccatcccga tgccagtccc 1020
agtcctggtc cccatcctgg tcctgctcct tggtttgggg acctcaatga ctggaactcc 1080
catgtcccaa catggggacc cacagtttgg ggtgaggggc tctcacccce caataaaacc 1140
atctgcagcc ccaacctcgc tccaattctt cgttcccacg ttgggtgggt cgggctccca 1200
gtgctcccag ccgttatgtc ccgtaagcgt cggctccact gcataaaaag aaaaaaaaaa 1260
aa                                                              1262
```

Figure 6

Genomic Sequence TAP1

(of the beginning of exon 2 at the 3' end)

```
GGC GAG ATG GCC GTG CCC TAC TAC ATG GGG CGA GCC AGC GAC TGG GTG GCC CGC GAG GAC AAG CTG GCA
 G   E   M   A   V   P   Y   Y   M   G   R   A   S   D   W   V   A   R   E   D   K   L   A

GCC ATC CTG CCC ATG GTG CTG CTG GGC CTC AGC AG    GTACTGGCATAGGGGGGACGCGGTGCGGGCAGGGGGCAGGCGCG
 I   L   P   A   M   V   L   L   G   L   S   S

GGACCCCCTGACACCCCACTGCCGTCACAG    C GCT GTT ACT GAG CTG GTG TGT GAT GTG ACC TTC GTG GGG ACA
                                    A   V   T   E   L   V   C   D   V   T   F   V   G   T

CTG AGC CGC ACG CAA AGC CGC CTC CAG CGC CGC GTC TTC GCC GCC GTC CTG CGG CAG AGC ATC ACC GAG
 L   S   R   T   Q   S   R   L   Q   R   R   V   F   A   A   V   L   R   Q   S   I   T   E

CTG CGC GAT GGG GCC G    GTGAGGGGCACCGGGCTGGGAGGGGACACGGGGATAAGGACACAGGGGTGGCACTGACGGGCGCTG
 L   R   A   D   G   A

TCACCCGGCAG   GG GAT GTG GCC ATG CGG GTG ACG CGG GAT GCG GAG GAC GTG CGC GAG GCG CTG GGC AAG
              G   D   V   A   M   R   V   T   R   D   A   E   D   V   R   E   A   L   G   K

GCG CTG AGC CTC CTG TGG TAT CTG GCA CGC GGC CTC TTT GCA ACC ATG GCC TGG CTG TCC
 A   L   S   L   L   W   Y   L   A   R   G   L   F   A   T   M   A   W   L   S

CCG CGC ATG GCG CTG CTC ACC GCG CTG GCG CTG CCA CTG CTG GCA CTG CCC AGG GCT GTG GGG CAC
 P   R   M   A   L   L   T   A   L   A   L   P   L   L   A   L   P   R   A   V   G   H

TTC CGG CAG   GTATGGGCTGCTGCTGTCTGCACCTCCATGCCCTTTGGTCCCCTCGGTCCCCTCCATGTGCCCTCCAGTGTC
 F   R   Q
```

Figure 7a

```
ACCACCATGTACTCATTGCCCTATCCATGTGCCCCTTCCATGTACCCACCACCATCCTCCTGTGTCCCCTCTGTGTGACCGGC

TGTCCCTCCACGTGCCCCATGCCCCTTCCATGCGTCCCACCATCCGTGCTCATTATTCCCTATGTGTGACCATTATCCCTTCCA

CATGGGTTCTGTTCTCTGCATGCCCCCACTGTCACCTCCACATGCCCACGTCCCCTTTATGTCCCCTCCACGTGTTCTTTG

TTCCCTCCATACATGCACTGTCCCCTGTCCCCCATTCCCTCCACCGCCCCCAATGACACTGCTGTCCCCAG  GCC CTG GCA
                                                                         A   L   A

CCA CAG ATG CAG AAG GCG CAG GCC CGG GCC AGC GAG GTG GCA GTG GAG ACC TTC CAG GCC ATG GCC ACT
 P   Q   M   Q   K   A   Q   A   R   A   S   E   V   A   V   E   T   F   Q   A   M   A   T

GTG CGC AGC TTT GCC AAT GAG GAT GGG GCA GCT GCA CAC TAC CGG CAG CGC CTG CAG CAG AGC CAC CGC
 V   R   S   F   A   N   E   D   G   A   A   A   H   Y   R   Q   R   L   Q   Q   S   H   R

CTG GAG AAA AAG GAT GTG GCC CTC TAC ACT GCC TCT CTC TGG ACC AGT GGT  GTATGGGATGGGGTGGCTCAAT
 L   E   K   K   D   V   A   L   Y   T   A   S   L   W   T   S   G

AGCATGGGGACGTGATGGGATGGGGCTGGGGGCATGGGGACATGTGGGATAGGGCTGG

GAGATGTGGAGACGTGATGTAATTGAGATGTCAGGAGATGGGGACAGAATGCCAACGGGCTGGAGGCCATAATGGTGTGGAGATGGCAGGT

CATGGGAATATGATGGCATGGGACTGTGGGACACTAGATTTGATGCATGGGGCTCT

GGGGCAGGAGGATGCAGTGCAGTGGAATGGGCGGCATGGGGACGTGACACTGACAGAGTGGTGCTGGGACTCAGAGTCCCAGGGGGA

ATAGCACAGCTGTGGGGACACTGGGACAGGGGGACATTGACAGAAACAGGAGAGGTGGACAGAGAGTGGTGCTGGGACTCAGAGTCCCAGGGGGA

GGTGTCCCCTGGTGACCTCATGGCCATCCTCCAG  TTC TCA GCC CTG GCC CTG AAG ATG GGG ATC CTC TAC TAT GGG
                                      F   S   A   L   A   L   K   M   G   I   L   Y   Y   G

GGG CAG CTG GTG GCC GCG GGG ACC GTC AGC ACT GGG GAC CTC GTC ACC TTC CTC TAC CAG ATA CAG
 G   Q   L   V   A   A   G   T   V   S   T   G   D   L   V   T   F   L   L   Y   Q   I   Q
```

Figure 7b

```
TTC ACT GAT GTC CTG GAG  GTGAGCCTGAGAGGATGCCCATATCCGGATGTCCCCTGCCACAGTCACAGTGTGTCA
 F   T   D   V   L   E

CAGTGTCCCTGTGTTCCTACATCCTCCCTGCTGTGTCTCCAGGCCAATCGAGTGTCCCATGCCATGTCCCTGTCCCCACG

TCTAACCCTCTGTGACCCCTGCCACATCCCTGCCACATCCCTCACCTCCCTGTCCCCATACCCGTCCCTATGCCAATCCCACTGTGT

CCCTCGCTGCCCCATGTCACCATGCCCCACGCCACATGCCCCTCCCTGCCCCTGCACTACGCTGTCCCAG  GTC CTG CTC GAC TAC
                                                                         V   L   L   D   Y

TTC CCC ACA CTG ATG AAG GCT GTG GGC TCT TCG GAA AAA ATC TTT GAG TTC CTG GAC CGG GAG CCA CAG
 F   P   T   L   M   K   A   V   G   S   S   E   K   I   F   E   F   L   D   R   E   P   Q

GTC TCA CCC TCA GGG ACA ATG GCA CCC GCT GAC CTG CAG GGC CAC CTC CAG CTG GAG GAT GTC TGG TTC
 V   S   P   S   G   T   M   A   P   A   D   L   Q   G   H   L   Q   L   E   D   V   W   F

TCC TAC CCT GGG CGC CAG GAA ACC CGT CCT CAA  GTGGGCACAGAGACACAGCCAGGGACACGGGGGTGTGGTGGGACA
 S   Y   P   G   R   Q   E   T   R   P   Q

GCGTGACAGGTGTGGAGCACAGTGGGGTGATTCAGGACACATGATGTGAGGATATGAAACAAGGAGATACATGGAGG

GGGTGGTATGGGGACACTGGAGAGGGACACATGAGATCATGGTATTGAGGCGCGGGACATGGGGTTTGTGGCACTGGGACAT

GATGAGTGACACAGAGACATGTGGGGAGGGCATGGGAATGTAGAGGCCGTGGTA

GGG GTA TCA CTG GAG CTG CGC CCC GGG GAG GTG CTG CTG GCA CTG CTG GGA CCC CCG GGC GCA GGG AAG AGC
 G   V   S   L   E   L   R   P   G   E   V   L   A   L   L   G   P   P   G   A   G   K   S

ACT CTG GTG GCC CTC GTG TCC CGC CTG CTG CAC CAG CCC ACG GCC GGG CGC CTG CTG GAT GGC CAC CCC
 T   L   V   A   L   V   S   R   L   H   Q   P   T   A   G   R   L   L   D   G   H   P

CTC CCC GCC TAC CAG CAC TCC TAC CTG TGC CGC CAG  GTGAGCAGCCACATGTCCCCATGGCTCCTGGTTGTGTCCCCCTG
 L   P   A   Y   Q   H   S   Y   L   C   R   Q
```

Figure 7c

TGTTCTTGCATATCAGCAGCCATCCTCATTGAGTCACCAGATATCTGGGTCCCAGCCATCACCACACCCTGATGTCTCTGCCATATCA

CCACTGTGTCCCCTGCAGTGTCCCGGCCAAGTCCCCAACCATCCTTGTGTCCCCAGATGTCCCTGACACAT

CCCCAGCCATCCCCACCGGCCTCCACTGCCACGTTGCCCCAGCTGTCCCCCACTGCAG GTG GCC GTC GTC CCC CAG
   V   A   V   V   P   Q

GAG CCG CTG CTT TTT GCC CGC TCA CTC CAC GCC AAC ATT TCC TAT GGG TTG GGG GGC TGC AGC CGG GCA
E   P   L   L   F   A   R   S   L   H   A   N   I   S   Y   G   L   G   G   C   S   R   A

CAG GTG ACA GCG GCC GCC CGG GTG GGC GCC CAC GAC TTC ATC ACT CGC CTG CCC CAA GGC TAC GAC
Q   V   T   A   A   A   R   V   G   A   H   D   F   I   T   R   L   P   Q   G   Y   D

ACA G GTAAGCTGTCCCCTTTCTGTTCCGGGTCCCCTCCATGGTCCCCGCCGCTCGTCCCCCGCAG AG GTG GGC
T   E   V   G

GAG TTG GGA GGA CAG CTC TCC GGG GGG CAG CGG CAG GCG GTG GCC ATT GCC CGT GCA CTG CTG GAC
E   L   G   G   Q   L   S   G   G   Q   R   Q   A   V   A   I   A   R   A   L   L   D

CCC CGC ATC CTC ATA CTC GAC GAG CAC ACC AGC GCC CTG GAC AAT GAG AGC CAG CAG CAG GTGGGATGTC
P   R   I   L   I   L   D   E   H   T   S   A   L   D   N   E   S   Q   Q   Q

CCCCACGTCCCCGTGTCCCCACATCCCCCTGAGCCCTGTGTTCCCTCAGATTGCACGCCTAGGTCCCCATGGTCCCCTGTTCTGGTGTCCC

CTTATCTCCACTCCTGGTGTCCCTGGTGTCCCTGGTCCCTGGCCAGTGGCTGAGGAACATCCCCTGAACCGTTTCCTCCTCCCACAG GTG GAG CAG
                                                                          V   E   Q

GAG ATC CTC GCA GCC AAA GGG TCG GGG CGT GCA GTG CTG ATG GTG ACG GGG CGG GCA GCC CTG GCG GCG
E   I   L   A   A   K   G   S   G   R   A   V   L   M   V   T   G   R   A   A   L   A   A

Figure 7d

CGG GCA CAA CGA GTG GTG GTG TTG GAG GGG GGA GAG GTG CGG CAG GAG GGA CCC CCC CAC GAG GTG GTG
 P   A   Q   R   V   V   V   L   E   G   G   E   V   R   Q   E   G   P   P   Q   E   V   V

CGC CCC GTC AGC CTT NTT GCC GGA CTG GGG ACA CTG GGG ACA AGG GAG CAC CGG GGG AGG GGG ACA GAG GGA TAG
 R   P   V   S   L   ?   A   G   L   ?   T   T   R   E   H   R   G   R   G   T   E   G   *

CGGGAGTTTTGGATGGGGAGGGCAGGGGGTGGGTGGGATGTGGGACACTGCCGTTGGGACACTGAGGTGGGACAC
CGGGGCAGCAACAGGGACCACAAGAGCTGTGCCGTGGGACATGATGCCGAGCCGGGCGCCGCTGCCGCTGTACGACACACA
ACGGCCACAGACTGCAGTGCCACTGAGTGCCACCAGGGCCGGGGGTGGGACAACTGGGAATAAAGCCGCATGTTTGT

Figure 7e
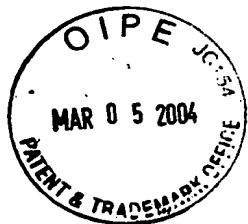
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TAP2G

-213
CGCCATACATTNTGCGCCTGTCATGCACGGTGNTAATGGCCGACCTGGCCNTTCTTCCCAGCACTGGCCCA
TTGGGCTGGGTGGGC  -107
-106
TCCTGGCGGAGGCCGGCGCTGGCGCCTCCTGGTGCTGGGGGGCCGGGACCCCGTGGGGCTGCAGTGCTGCT
AGCATGGGCCCCGCC  0
                                                                        t
+1   ATCTTCCTGACCCTACGGGGCTATGTAGGTCTGCTGGAGCTCCCCGGTGCTGCTGGCC  ATG GCA ACG CCG TC
TGG CTG GTG CTG ACC CAC  +93   5'UT                                   M   A   T   P   S

W   L   V   L   T   H

+94   GGG ACA GCT GTG GTG GCA TTG CTC ACC TGG AGC CTC CTG GTC GCC ACT GGG
GCA AAG GAG GCA AAG GCC TGG  +174
G   T   A   V         V   A   L   L   T   W   S   L   L   V   P   T   V   A   T   G
A   K   E   A   K   A   W

+175   GTG CCC CTG AGG CGG CTG GCC CTC GCC CTG GGG TTC CTT GGC TGT GCC
TTC CTC TTC CTC GCA TTG GCT  +255
V   P   L   R   R   L   A         L   A   L   A   W   P   E   W   P   F   L   G   C   A
F   L   F   L   A   L   A

+256   GCA CTG GGT GAG ACC TCA TTG CCC TAC TGC ACC GGG AGG GCT GTG GAT GTC CTC CGC CAG
GGG GAC GGC CTC GCC GCC TTC  +336
A   L   G   E   T   S         L   P   Y   C   T   G   R   A   V   D   V   L   R   Q
G   D   G   L   A   A   F

+337   ACC GCT GCT GTC GGC CTC ATG TGC CTG GCC TCT GCC AGC AG
GTAGGGACCCCACATCCCTCCACAAACCCCATCCACCTCTGGTGGTCGTCT  +429
T   A   V   G   L   M   C   L   A   S   S         S
```

Figure 8a

+430
GGTGGGTTTGGGGGTCTCTGTCCATATCTGGGGGTCATCTGATGGGTCATCTGATGGGTTCTGGCACTCCACTGACCCTTTGTGATTGTCTGAGGGTTCTG
GCTCTCCATTGACCC   +536

+537   CTGATGGGTTTGGAGTCGCCCCCCCCCAATCCTTCCCAG C TCG CTG TTT GCC GGC TGC CGC GGT GGC CT
TTC ACC TTC ATC AGG TTC   +624
   S   L   F   A   G   C   R   G   G   L
F   T   F   I   R   F

+625   CGC TTC GTC TTG CGC ACC CGC GAC CAG CTC TTC TCC AGC CTG GTG TAC CGG GAC CTC GCC
TTC TTC CAG AAC ACC ACA GCA   +705
        R   F   V   L   R   T   R   D   Q   L   F   S   S   L   V   Y   R   D   L   A
F   F   Q   N   T   T   A

+706   G GTACAGACTGGGGGGCACTTTGTCCCTGTCCCCACACCATACCCCAGCTCACCGTACTCAACTCCACAG CT GAG
TTG GCC TCC CGG CTG ACC ACC   +828
                                                                              A   E
L   A   S   R   L   T   T

+829   GAT GTG ACG CTG GCG AGC AAC GTG TTG GCA CTC AAT ATC AAC GTC ATG CTG AGG AAC CTG
GGG CAG GTG CTG GGG CTC TGC   +909
        D   V   T   L   A   S   N   V   L   A   L   N   I   N   V   M   L   R   N   L
G   Q   V   L   G   L   C

+910   GCC TTC ATG CTG GGG CTG TCC CCG CGC CTG ACA ATG CTG GCA CTG CTC GAA GTG CCG CTC
GCC GTC ACC GCA CGG AAA GTC   +990
        A   F   M   L   G   L   S   P   R   L   T   M   L   A   L   L   E   V   P   L
A   V   T   A   R   K   V

Figure 8b
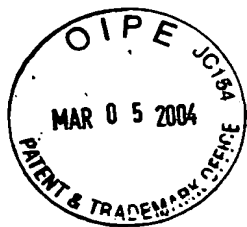
+991   TAT GAC ACC CGG CAC CAG
GTGATAGCAGGGATGGGATGGTGTAGGGTTGGGGTGACAGGGATGGAGGCAATGGCAATGGGATGGAACAGTGGGAGTGGGGAT +1091
        Y   D   T   R   H   Q

+1092
AGTGAGGTGGGGATTGTGGGGTCAGGGTGGCAGGGTGGCAGGGATGAGGGCAGCTGCAATGAGGGCAGCTGCAATGGGATGGAACAGTGGGAGAGAGCAGGATGGGGA
CATGGGTCCAACACA +1198

+1199
GCAAGGATGAGAGGATGGAGAAGAGTGGAGCAGGAATGGAGCAGGAATGGAAGTGGAGCAGGAATGGAAGTGGAGCAGTACTTGGCCATCCCATGGGTGCTGACACCCCACTGTCC
CCCCAG ATG CTG +1302
        M   L

+1303   CAG CGG GCC GTG CTG GAT GCA GCA GCC GAC ACC GGA GCG GCA GTG CAG GAG TCC ATC TCT
TCC ATT GAG ATG GTA CGG GTC +1383
        S   I   E   M   V   R   V   D   A   A   A   D   T   G   A   A   V   Q   E   S   I   S
        Q   R   A   V   L   D

+1384   TTC AAT GGC GAG GAG GAG GAG ACA +1464
CTG CGG GAC CGG GAC ACA
        F   N   G   E   E   E   E   T
        L   R   D   Q   R   D   T

+1465   GAG AGG GCC ATT TTT CTC CTC ATC CAG CGG
GTGAGGCTGACACGAGGGGACACCCTGGTGTTCTGGGTGGGGACATCCCCGCTGAGCCCCAT +1561
        E   R   A   I   F   L   L   I   Q   R

+1561   CCCCACAG GTG CTG CAG TTG GCT GTG CAG GCA CTG GTG CTA TAC TGT GGG CAC CAG CAG CTC
CGC GAA GGG ACC CTC ACT +1641
        V   L   Q   L   A   V   Q   A   L   V   L   Y   C   G   H   Q   Q   L
        R   E   G   D   L   T

Figure 8c

+1642 GCC GGC AGC CTC GTC GCC TTC ATC CTC TAC CAG ACT AAA GCT GGC AGC TGC GTG CAG
       GTGAGGTCAGGCAGTGGCGTCCTCTGCCACCG +1729
        A   G   S   L   V   A   F   I   L   Y   Q   T   K   A   G   S   C   V   Q

+1730
GATCCCCATGACTGTGGCCACATCCCCGTGTCCCCACCCTGGGTGCCTGGGGGTCACATCCCCATGTCCCCTATCCTGGGTGCTGTG
CATGCAG GCA CTG +1834
 A   L

+1835 GCG TAC TCC TAT GGT·GAC CTT CTG AGC AAT GCA GTG GCC GCC TGC AAG GTC TTT GAT TAC
CTG GAC TGG GAG CGA CCT GTG +1915
 L   D   W   E   R   P   V   A   Y   S   Y   G   D   L   L   S   N   A   V   A   A   C   K   V   F   D   Y

+1916 GGT GCT GGT GGC ACC TAT GTG CCC ACC AGA CTG CGG GGC CAC ATC ACC TTC CAT CGG GTG
TCC TTC GCC TAT CCC ACT CGC +1996
 S   F   A   Y   P   T   R   G   A   G   G   T   Y   V   P   T   R   L   R   G   H   I   T   F   H   R   V

+1997 CCT GAG CGC CTC GTC CTG CAA GAT GTC ACC TTC GAG CTG CGC CCC AGT GAG GTG ACG GCG
TTG GCG GGG CTG AAT GGC AGC +2077
 L   A   G   L   N   G   S   P   E   R   L   V   L   Q   D   V   T   F   G   L   R   P   S   E   V   T   A

+2078 GGG AAG AGC ACC TGC GTG GCA CTG CTG GAG AGA TTC TAT GAA CCT GGG GCC GGG GAA GTG
CTG CTG GAC GGG GTG CCG CTG +2158
 L   D   G   V   P   L   G   K   S   T   C   V   A   L   L   E   R   F   Y   G   P   G   A   G   E   V

Figure 8d

MAR 0 9 2004

+2159 CGG GAC TAC GAG CAT CGC TAC CTG CAC CGC CAG
GTGANGGGGTGGGGGAAATGTTAGCTGCACTGAACANTGCTGGGCTGAACCTCTGCCCTGG +2254
       R   D   Y   E   H   R   Y   L   H   R   Q

       +2255 GGGCAG GTG GCA CTG GTG GGG CAG GAA CCC GTG CTC TTC TCT GGC TCC ATT CGG GAT AAC
ATT GCC TAC GGG ATG GAG GAC +2335
       V   A   L   V   G   Q   E   P   V   L   F   S   G   S   I   R   D   N
A   Y   G   M   E   D

       +2336 TGC GAA GAG GAG GAG ATC ATA GCA GCT GCA AGG GCT GCG GGT GCT TTG GGC TTC ATC TCT
GCA CTG GAG CAA GGC TTT GGC +2416
       C   E   E   E   E   I   I   A   A   A   R   A   A   G   A   L   G   F   I   S
A   L   E   Q   G   F   G

       +2417 ACT G GTGAGTGCTGGGGAGCAAGGGGGGACCCGGGTGTCTGACCCCACTCATCCCCACCCTCATCCTGCAG AC
GTA GGG GAG AGA GGG GGG CAG +2511
       T
G   E   R   G   G   Q

       +2512 CTG TCA GCG GGG CAG AAG CAG CGC ATC GCC ATC GCC CGC GCT TTG GTG CGG CGT CCC ACC
ATC CTT ATC CTC GAC GAA GCC +2592
       L   S   A   G   Q   K   Q   R   I   A   I   A   R   A   L   V   R   R   P   T
I   L   I   L   D   E   A

       +2593 ACC AGT GCT CTG GAT GGG GAC AGC GAT GCA ATG
GTGAGCACTGAGCAGTGGGTGGGGGGAGGGTCTG?CCCTGCAGTGCATGCTGATGGGCAGCTG +2688
       T   S   A   L   D   G   D   S   D   A   M

       +2689 TGTGTCCTACAG CTA CAG CAG TGG GTG AGG AAC GGA GGG GAC CGG ACG GTG TTT ATC ACC
CAC CAA CCA CGG ATG CTG +2769
       L   Q   Q   W   V   R   N   G   G   D   R   T   V   L   F   I   T
H   Q   P   R   M   L

Figure 8e
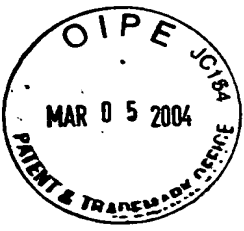
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GCC GAG CTG AGG ACC CGC GGC  +2850
A   E   L   R   T   R   G     E   K   A   D   R   I   V   V   L   E   H   G   T   V   A   E   M   G   T   P

+2851  GGA CCC TAC AGC CGG CTG TTA CAG CAC TGA
GAACCATGGAGCAGCTGGAGTGGCATGCGATGGGATATGGGGAGCAGTCAGTGACTGCCTTGCTTCCAGC  +2947
G   P   Y   S   R   L   L   Q   H   *

+2948  TGCAGGATGGGATGTTTTGGGATTGTGTGTGGAATAAAGTGGAGATGCTTTGT
+2999  3'UT
```

INTRON 2-3 : EF23(1B+1R)3R
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INTRON 4-5 : EF23 352H CON
INTRON 5-6 : EF23224RS
INTRON 6-7 : EF23(5B+5RB)1R
INTRON 8-9 : EF23277B CON
INTRON 9-10: EF23 43RSR
INTRON 10-11: EF23 43RSR
INTRONS 1-2 ET 7-8 INEXISTANTS CHEZ LE POUET

Figure 8f
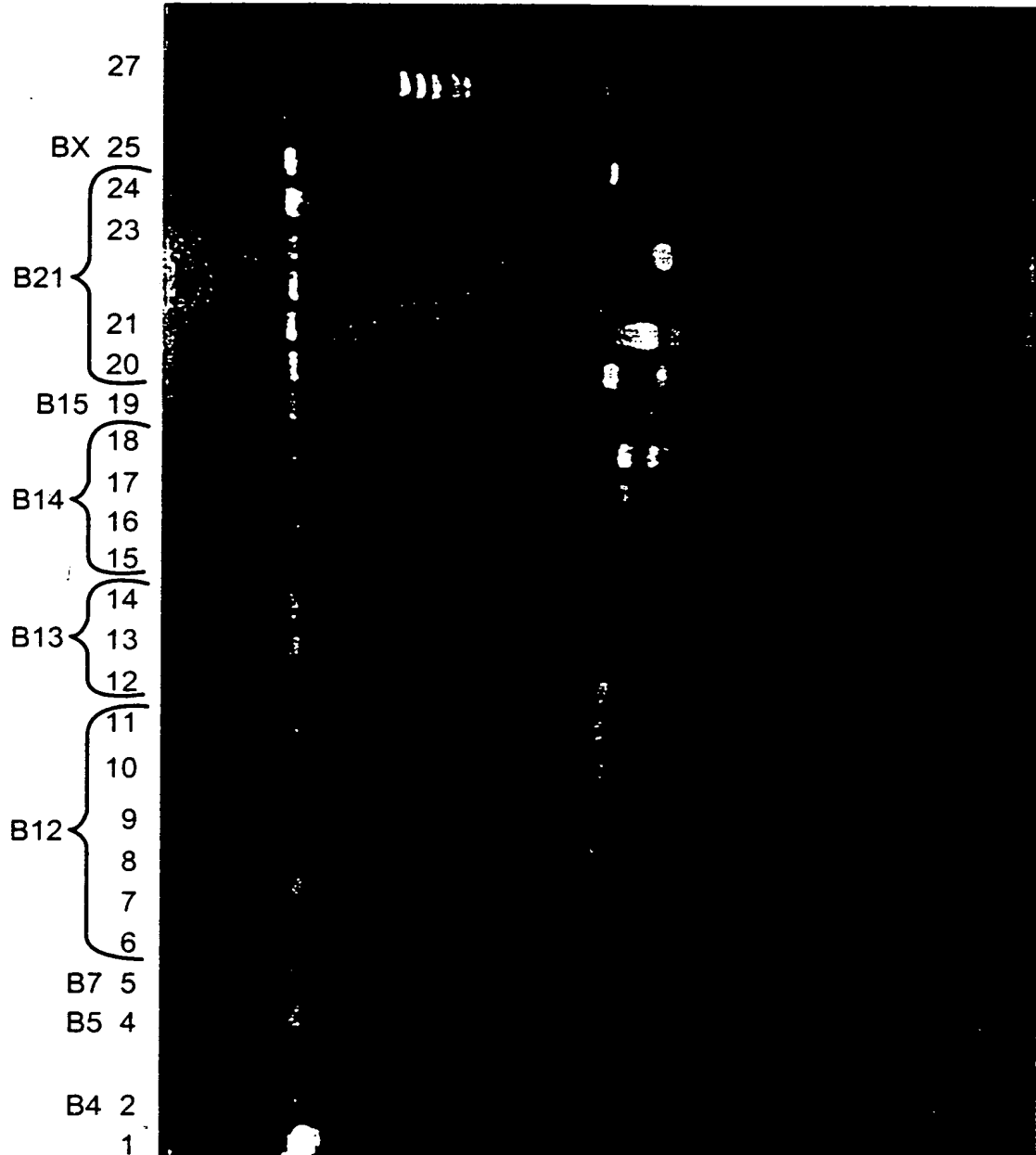
Figure 9

A5FIN.txt

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Figure 10a

A5FIN.txt

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Figure 10b
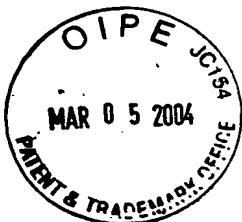
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Figure 10c

A5FIN.txt

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Figure 10d

A5FINB.txt

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Figure 11a

A5FINB.txt

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CACCCCTGTG TCTTGGTCCT CATATCCATG TGTCCCTTGT GCCCCATCCC CCAAATCCCC 4020
ACATCCCCCA TATGTTCCCA TACCCTGCTG TGTCCCCCCA GTGTTCCCCC GTCTTTCATT 4080
CTCCACTATC CCCCGTATTC CCATATGTCC CCCTGTCCAC CAGTGTCCCC TCATCCCTCT 4140
GTGTCCCCCT GTCCCCCAGT GTCCCCCACG TCCCTGTATG TCCCCATGTC TCCTAGTGTC 4200
CCCCATGTCC GTGTCCTCCA GTATCCCCCA TGCCTCCCCG TGTCTCTTCA TGCCCCACAC 4260
TCCACGTCCC CACACTCCAT GTCCCACTGC CACAGGACAA ATCCCTGTCC CGGGCCTCCA 4320
CGTTCCTCCG GGGCCGCGTG GAGCAGTTGG GGACCTATGG GACAGCCATT ACATCCTATG 4380
CATTGGCACT GGTGGACACC GCTCCTCCGG GGCCGCATCC GGCGGTGGAA CGTCTGCGGG 4440
GCATGGCCCG GAGCGCCCAC GGTGCGTCTG TCTCTGTCCC CATGGGGTGG TGGCACCTCT 4500
GTCCCCATGG CTGCCTCCTG GACCCCTCTG TCCCCTCCTT CAGATTCACT CTCATTCGAA 4560
TCCTTCAATT TTATTCTCCC TCAAACTCTT CTTCTTTGTA TTCTTCACAT TCATTCCTAT 4620
TCAAATTGCT CTCCTTCCTG TCTGTTCTTC TTCAAATTCT TCTTCAATTT TGTTCTCCTG 4680
ATTAATTCTC TTAAAATTAA CTCTCGATCA AGTTCTGCAG ATTCGTTCCA CTTCGGATGG 4740
ATTCTTCTCC AAACTGTTCT TCAGATTCAC TCTCCTTCAA TTTCGTTCTT GTAATTAATT 4800
CTTCTTCAGA GTGATTCTTC AAACTCTTCT TCATGTTCTC TTCAAGTCCA TTCCCTGCAC 4860
TGACTCCGGG TGCTCAGGAC CCCCCCGTGA CCCCATATGA CCCCATATGA ACCCCCCATG 4920
ACCTCCACAA AACCATATGA CCCCGTGACC TCCCATGACC CCTCATGACC CCATATGACC 4980
CCCCATGACC CCATCCCTGT GCAGGTGGCC GTGCAACCTT CTGGCCATCC GGTGGCCCCG 5040
CAGCCACGGT GGAGGCGACG GGTTACGCCC TTCTGGCACT GCTGCAGAGC CGCGACATCG 5100
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ACTCCACGCA GGTGGGTGGG GGTCACTGAC CCCCCGGGTG CCTCGGGGTG GGGGTGATTT 5220
GATCCCCAGG TACCTCTTTG GTGGCTGTGT CCCCAACCTG CTTGGTGTTC CGCAGGACA 5280
CGCTGGTGGC CCTGGAGGCG CTGGCCCAGA TGTGGCTGCA CTGGGGCCGT GGGAACACAA 5340
TGGGGCTGAA CCTGGGGCTC TCCTGGCCGG GGGGTGCCCG GGGGAGGGCT GGTGGCACTC 5400
AGGTTATGCT GAAGCCGGGG CTGGAGCCGC TGGAGCAGGA GCTGCAGGTG GGGACATGGC 5460
GGGATGTGGG GACACGAGGG ATGTGAGGAC ACTGGGGACA TGTCTGGACT TGGTAGGATG 5520
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GGACATGGTA GGACATGATG GACACAGGGC TTTGGGGTCC TTGGGTCCTC GCTCTGTCCC 5640
CATGTCCCCA GGTGCCTCTG GGCAGCCCAG TGACAGTGCA GGTGGAGGGA CACGGCGAAG 5700
GGACGCTGAC GGTGGGTGGC TGCATGGACA TTGGTGTCAT CTCCAAGACC GATGTCCCCT 5760
CACAACCTCC CCTCATGGTG TCCCCTCATG CTGCCACGGT GTCCCCTGCT GTCCCATCAT 5820
GGTGTCACGC TGTCCCCAGG TGCTCCGCCA GTTCCGCCTG CTGTCACCTC CGAACGCCAC 5880
GTGCCAGGCG CTGCACCTGG AGGTGGCCAT CACCGGCCCC ATCCTGTACC ATGGTGAGGC 5940
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Figure 11b
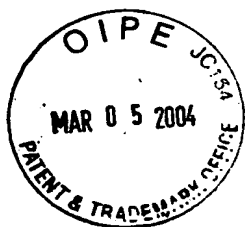
A5FINB.txt

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CCTAAGGAGG GGGAGGAGCC TACGGAAGGG GCAGTGCCCG TGGAAGGGGC GGGGCCAGCA 6120
GATGACCCCG CCCCCCTCAG CCCCGTGTCC TTATGGGATG CCCGTAAGCG GCAACGCCGC 6180
AGCACACATA ACCCTGCCCA CGAGGTGGCC TTCCTGGTCT GCTTCCGGTG AGGGGCGGAA 6240
CTTCCTGTCC CTGGGGGCGG GTCTTCCTGC TGATGGGCGT GGCTTATTGC TGAGGGGCGT 6300
GGCCTGTTGT AGGCGGAGCC CAGGGGTGGC ACTGACTGGG ATGGCGGTGG TGGAGATCAC 6360
TCTGCTCAGT GGCTTCTCAC CCCATAGAGC TGACCTGGAC AAGGTAGGGG CCCAGGGGGA 6420
CTTGTGGGAC ATGTTGGGGG GTTGAGGGGA GTTATGGGGT GTGGGGTTTG GGGGTGTTGG 6480
AGTTGTTGAG GTGGCAGAAT GTTTGGGTTG GAGTCATGGG ATATGGGGCT ATTGGGGTTT 6540
GAGGGTGTTG TGATGTTGGG AAACATTGAA TTGGGGTTGT TGAGTTTGAG GGTGTTGGGG 6600
TGTGCGGGTG CAGAGCTGCA GCTGCTGGGT TGGAGTATTA AGGTGTTGGG ATGTTGGGGT 6660
GTTGGATGGC TTGGATGCGG GTGTTGGGGT GGGCACGTAT CTGGGTGCTG CTGTCCCACA 6720
ACAGCTGCGG GACGTGGTGG ATCACTGGAT CAGTCACTAT GAGTTGGAAG GAAACCAGTT 6780
GGTGCTATAC CTGGATGAGG TGTGTCCTCC CGTGTCACCC TATAACCCCA GTGGCCCCAT 6840
GTTCTCATAT CCCCCATGTC CCCGTGTCCC CACACCATAT CCCATTCTCC CCACACATCC 6900
CCGTGTTCCA CCACGTGTCC TCATTTCTGT CCCTGTCCCC AGGTCCCCCC CGAGCGGCAG 6960
TGTCTCAGTT TTGGGGCCAC CCAGGACGCG GCTGTGGGTC ACATGCAGCC GGCAATGGCA 7020
GCCATCTATG ACTACTATGA GCCTGGTGGG TGGGGCCTTC AGTGGGAGGG GCCTAAATGG 7080
GTGGTGGTCT TCATGGGTGT GACCATTGGA GGAGGCGTGG CCGATCTGAC CCCTCCATGC 7140
CCCATCCAGG ACAGCGCTGC ACCGTCTTCT ACAACGCCCC CCAAAGGAGC AGCACCATCG 7200
CCACACTGTG CTCCCCCAAA ATCTGTGAAT GCGCCCAAGG TAGGACCCCA CTGTGACTCC 7260
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GGGTGAAATT ATGGGGTTTA TAGGGGAGCG TGGTTGAGTG ACATGCAGGA CATGGAGGGA 7380
ACCCACACCA AGAACCTTGT GTTTTGGGTC CCTGATGATG TTGGGAGATC CTATTGATGT 7440
TGGTGGTCCC CAGGGGGGTG TCCCCAAGCC CAAAGGAGGA CACAGGAGGT GACAGCTGAT 7500
GACCGCCATG ACTTTGCCTG CTACAGCCCC CGCGTGGACT ATGGTGAGAT CCCAAATCAC 7560
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TCTGCTGCCC CTGAGTCCCA CAGCTGCACA CTGTACCCCA CAAGTGGCCC CTGAAGCCTA 7680
AAAACATTCA CGAGGATTTT GTAGTTTTCT CCCTGTACCC CAGTTGTCCC TCTGACCCCA 7740
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TGCTGTCCCA GAGTGAGATA GGGGCTTTTG TGGCGTTTGA GACGGAAATC AAGGAGGTGC 7920
TGCTTGAAGG TGAGACTGAG GGTAGTGGGA CGGACTGGAA GGTGAGAATG GGAGCACTGG 7980
GAGAGGCAGG GAGTACTGAG AGGGACTGGG AATGACTGGA AATTGAGACT GGGTGGACTG 8040
GGAACTCTGG TAGAGACTGA ATGGGTATAC TGGGAACACT GGAAGAAGTT GTGGGATGAG 8100
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GGCACAATAT GAGAGTATAC TGGGTGGTAC TGGGAAAGCT GGGAGGACTC ATACTGGTGT 8220
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GGAAGAGCTG CCCACTGCGC CTGCAACTCC ACAACATCTA CCTGGTGATG GGGGGCAGCG 8340
GGAGGACGCG GGACCCTGAG GGGCGGTGAG AAGGGGCTGT GCCCCATGTC CACATGTCCC 8400
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CCCCCACTCA TGGTTGGAGG AGGTGCCATC CCCTGGACGC TGTAAGGCCA CAAGGTTGCG 8580
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GTGAGCCCCT GGGAGCCACT GGGAGCATGT TGGGTGCAGC TGGGACCATT CTGGGGGTGA 8700
ACTGGTACCA CTGTTGGATC AGTTGGGATC AATTGGGAAT AAACTAGTGT TGACTGGGAC 8760
CGTGTTGTGA CCAACTGGAA GTGTGTTGGA AGAAACTGAG AGCTGCTGGG GTTGAGTGGG 8820
AGCAACTGGA ACTGTGTTGG AACAAACAGG GGACCAACTG GGATCACACT GTGGTCAGCT 8880
```

Figure 11c

A5FINB.txt

```
GGGATCACAC TGGGTCAAAA AAGATCACAG TGGCCCAATT GGGGTCATAC TGGGGTGAGC 8940
TGGGATCAGA ACGAGTTTAA TAAACGTACA GTCGTCCGAG CCACCACAGA GTCAGCCCTC 9000
CAGCGGCGCA GAGCGGCGCA GCGCGCACTG GCTGCCCGCG GTAAGCGGAT GTGACGTCAC 9060
TTCGCGGCGC GCTATTCGAA CTCCAGCAGC GCCCCGCGGA GCGCCCCAAT GCCGCGGCCC 9120
AAACCGCGCA GCCCCCGGCG CCGGGGCCGC CCCCCCCCGG CCGCCCCCCC GCCACCCCCC 9180
GCGCGGCCTC GCGGTGAGTG CAGCCCGTAG GAGTGCGGAG TGTGGGGGCG GGGGGGGGGG 9240
CGTCTGGAGC GGAGCCTTTA TCACCGCTGT TTTCCCGATT TCCCCGTCTT TTCGCCCCGT 9300
TTCAGCCCGC CGGTACCGGC CCGGTCAGAG GGCGCTGCGG GAGATCCGCC GCTATCAGAG 9360
CAGCACCGCT CTGCTGCTGC GCCGCCAGCC CTTCGCGCGC GTGGTAACGG GACTGCCCCG 9420
GAACGGGACA CCCCCCAACC CCCCCAACGG GACCATCCCC CCACGGATGG ATCCCCCCCC 9480
ACACACATCC AACGTGGGAC CCCCCGCCCC AAAATGAGAT CTCAACGTGA GATCTGGGGG 9540
CCTCAAAATG AGACACTCTC CCCCCTCCCC CAACGGAACA CCCCGAAAAT GGGACCACAC 9600
ATAAAAGTGG GGACTCCCCT CCTCCCCCCC GCCCCGTCAA AATGGAACAC CCCCAACTGG 9660
ACCTTTCAAA AAATAACATT CCCCTCCCCC CAAAAATGGG ACTTACCACA AAGTGGGATC 9720
TTCCCCCAAA ATGAACACCC CCTCAAAATG AGACCCCTCG GACCCCCCCC AACCCCTCTG 9780
CACCCATCGC CGTCGTGCAC GGAAGGGAAA GGCTGTAGGG TACATCTACC CTTATTTCTT 9840
GGGTTTGTGT TTTGTTTTGT TGTTATTTAG AAGCAAAACC AAGACAACAA AGCCCAGCCA 9900
ATGCCATTTC CTGGCAGTGG ACGCAGGCGC AGGCGGGTTG GTCACAAAGC AAGAAGTTGC 9960
TGCGGGACTT TGTCGTTTTG GGGCCGTTCT CGTGAACTTC TGAGCCATGG ATGAGGAAAT 10020
TACTTATGCT GATTTAAGGC ATCCTACGGG CAGTTTGCCT CCTGCTAAGC GGCAGCGCGG 10080
TAAGGGATGC TCTGTGTGGT GGGTGCTCAC CGCAGGCTTG GTTTGGGGGC TTGCTGTTCT 10140
CTGAGAAACA CCAGCAATGC TGGTTGGGTT CTGGGTCCAC CCTGGCTTGT ATGGGGGAGT 10200
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```

Figure 11d

Conti131.txt

MAR 0 9 2004

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TGTCCCAGGC CATGGTCCTG ATGTCCCTCA GACCCTCCTA ACCATGGTCC CAGCATCCCA  180
ATACCTCCAC GTGTTTCCAA TATCCCCACA TCCCCCCTCA CCAGCCAGGA GCAGTCGGAC  240
GGAGACACGC ATTGGTTTGG CCAGTGCAGT GTGGGTGACA ACGCAGCTGT AGATGTCCCC  300
GTGGTGTTGG GGGCGTGCGG GGATCAGCCG TGCTGCCGCC GTCCGGCTGT AGGTTCCATC  360
GGCTGCCTGG CGGTGACCTG AAGTCCAGCT GTCCATCACT GTGTCCCTGG GTGACTGTGA  420
TGTCCCCGAG CCCCCGGCGC GGCGCTGCCA CGTCACCGTC ACATCCAAGG GGTAGAAGCC  480
AGACACGTGG CAGCGTAGCT CTGCTGACGT CCCCGGGGCC ACCACCAGGT TCTTCGGGGA  540
CAGCGTCACC TTGGGGGGCT CTGGGAGACA TGTGGGGGGA CATCGGTCCC ATATAGCCCA  600
TAGGGCCCCT CCTATAGGGC TCATCCCCCC CTATAAACCT ACAGGTGAAC TATGGGATGA  660
TGCCACCCCA TCCTATAGTC CTCATAGGAA TACCACCCGG TCCCATCCAC CCTATAGCCT  720
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TGTGCCCGTG GGGCAGGAAC ACGGAGCAGA TGTAGGTGCC CTCATCCCCC GGTGATGGCC 1020
GCGCCAGCCG CAGTGTCACC GCTGTCACCC CGTCCCCATC CCGTGTCCCC AGCAGCAGTT 1080
CGGCCCCGGG GGTGGCGCGG GGGGCGCGGG CGGTGGAACT GTCATAGG            1128
```

Figure 12

AB1B3FOR.txt

```
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AAGCATGAAG AAAGCACCAC ATGATGAGAG GAACAGTTCA TCCCACAGCT CACGCAGGAA   120
GAACCCATTT TTAATTTAAT TTGGGAGGGA GCACTCACCC AGGTCTGAAG CTAGTTTATC   180
TGCAATGAAA CAAATAAGAA ATGCATGATG AGAAGGGTCA GAATATCATC CCATGGCTGA   240
TCCCATGGGA AGACCCCGAA TCTCTTTGGT TTGCGGAGGA GGACTCACCC AACTGTGCAT   300
TCCTTCCCTC TGCAAAGGGA AAGCAGAAAC AGTG                               334
```

Figure 13

AB1C1FOR.txt

```
TGGGATCAAG TTGAGTAGAC ATAGCATCCT CGCTTTTAGA CAAGACCTGC ACAGTATACC    60
ACCGTTTACT GTGCAGATAA TGACCAAAAG CAATATGCGT CACACTTTTC TGGTGACAAC   120
GTCACAAAAT GGCGGTCGTC AATCGTGACG AACAGCACAA ACGCCCTTTC TCATCGAAGA   180
TTTCAATCTG CCAGACCTGG TGACGCGAAC CGAGATGCAA CGGTTTGCAT ACGCCGCGCA   240
CCCGCCCTTC TCGTGCCGAG CGGACGTGGT TAGCATTGAT TTCCAGACCA ACCACTTTTT   300
GCTCACCTTC GGTACATAAA TAACCGGCAA CGGAACCGAT ACTTTCGGCC ATTACCACGG   360
GTGCTCCTCC ATGCAGCAAC CCGAAAGGCT GCTTTGTCCG CGAGTCTACT GGCATTGTCG   420
CTTCAAGGGT GTCATCACCA ATATGTTCAA AGCGAATATC CAGGAACCCC ACCATGTTTC   480
CTTCACCCAT AGCATTCAGT GCTTCCAGGG TGATTTTCCG TTTCCAGATC ATTTAATAAT   540
CTCCAGTTAA AGCCTGCACA GGATGGCTTA CCCCGTGCCT TCAACCCGTT TTATCTGGCT   600
ACGGCAAGGA ATATCCGGTT                                               620
```

Figure 14

AB3A11RE.txt

```
CCGTCGCCTC GGCTCTCCCT CGGGCTCCAC CCCCCCGTTC CGCCCCTTTG CCGCCGCATC    60
TCCCGCTCTG TACCCTCCCC AAGAAGTCGC TCAGACGGCG TCGCGTTGTC TGCACATCCT   120
CGGGGACCGT CTGTTGTGCG GCAGCAGGGG AGGGGAGCGG GCGGTCTGTG CTCTTCTATT   180
CCCTTCAGTA CAAGAAGGTG GTTTGGGTTC TTTAACCAAA TATACTCTTT TGTTTTTGCA   240
TAAAATCACC AGAAGGAATT GGTCTGTTGA ATATATAGGA GTGGTGGAGA GAGTCGAAGA   300
AGTGTTTCCT GTGACAAAAC ACCGTTAAAA GTGAATTCAT GGAGAACGCA CTGCAGTGAC   360
ACAGAAGGGA AAACACGAAA CATAAATAAT TTGCCGATTT ATCATCGATT TCAGGGTCCT   420
TTGGGCTGAT TGCTTTCCCA GTATTTCCCT TTGGAGAAAA ACCGGTGAAA AATGG        475
```

Figure 15

AB5B6FOR.txt

```
TCACCTGGCT TTGCTGCTCC AGACCCCGCA GGAAGCGACC CCCCTGGCCC CTGGCATCCC    60
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TCCAAAGGGT CAGTGGAGTC AGGCGGGTCC AAAGGTCAGT GCGGTCAGGA GGTCCCCAGA   180
TGTCAATAGG GTCAGGGGGA GGGATCCCAA AGGCCAATAA GGTCAAGGGG AGAGATTCCA   240
AAGGTCAGTA GGGTCAAGGT GCCCCAGAGG TCAATAGGGT TGGGGGAACC CAAAGATTAT   300
AGGGTCAAGG AGTGACCCCA AAGGACATCA GGGCCACTGA TTTGGGGTGG ATGGGAGAGG   360
AATTTGGGGA GTTCAGGAGA GTTGGAGGGG ATTTGGGAGG TTTTGGAGGA GACAGATGGG   420
GATTTGGTG GGAATTTGGG GAAGATTGGG TGGGATTTGG GATTTGGGTG GGATTTAGGT   480
GGGGATTTGG GGGGATTTTG TCTCTGGGTG TCCCATAC                          518
```

Figure 16
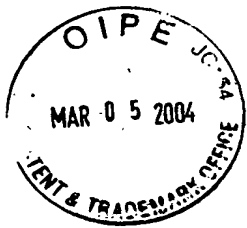
AB6E4FOR.txt

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TCTTTGGGTT TTGTGCTCGT TGTGCCACTA TTTTCATGGC ATCCTAAGAT GGTGCTGTAT   120
TATTTTTGTG ACACTGTAAG AGACTGGAGC AGAAATTTTG TCACAAATTA ACAAAAAAAA   180
AAAAAAAAAA AAAA                                                     194
```

Figure 17

AB6G8REV.txt

```
GTTCTATGAT TTCTTTGGTC CGAATACCAT GAAATCTGAT ATTTCCATTT CAGTATCTGA    60
ACTGGGTTCT CTGCTGGATC ACAGTGGTCC ACACAAAGAA GCAGAACAGT ATATCGCTCG   120
CGTCTTTAAC GCAGACCGCA GCTACATGGT GACCAACGGT ACTTCCACTG CGAACAAAAT   180
TGTTGGTATG TACTCTGCTC CAGCAGGCAG CACCATTCTG ATTGACCGTA ACTGCCACAA   240
ATCGCTGACC CACCTGATGA TGATGAGCGA TGTTACGCCA ATCTATTTCC GCCCGACCCG   300
TAACGCTTAC GGTATTCTTG GTGGTATCCC ACAGAGTGAA TTCCAGCACG CTACCATTGC   360
TAAGCGCGTG AAAGAAACAC CAAACGCAAC CTGGCCGGTA CATGCTGTAA TTACCAACTC   420
TACCTATGAT GGTCTGCTGT ACAACACCGA CTTCATCAAG AAAACACTGG ATGTGAAATC   480
CATCCACTTT GACTCCGCGT GGGTGCCTTA CACCAACTTC TCACCGATTT ACGAAGGTAA   540
ATGCGGTATG AGCGGTGGCC GTGTAGAAGG GAAAGTGATT TACGAAACCC AGTCCACTCA   600
CAAACTGCTG GCGGCGTTCT CTCAGGCTTC CATGATCCAC GTTTAAGGTG ACGTTAAACG   660
AAAGAAACCT TTAACGAAAG CCTACATGAT GCACAACAAC AACTTCTCCG               710
```

Figure 18

B5FOR.txt

```
CCACCACCGC TTTGGGCAGT GCCAGTGCTC CTCACAGGCT GTGGGGCAGA GCAGGTGACC    60
CCCCAAGGAT TTCCCCTACA AAGAGCCCCA CAGAGACAGA AATCCTTCAC CTGAGCTGCA   120
GCAAGCGCGC GGCTACACCC AGCATCAATC TTTGCCCAGC TTCTACCTTT GCCCAGCTTC   180
TACCTTTGCC CAGCTCCAGG GTGCAATGCG AGCAACTTGG CATCAGACCA ATACAGTCAA   240
AGGTTGGAGA ACATAAAACA CATCCCATTG CAGCTTTGTG CACCACCCTG GGTCTCTGCT   300
ATCACCAGGA ACATGGACAC AGGAGAAGCT TTGCCATAGC ACAGGAGAAA GCTGTGCGCT   360
GCACTTCATG AGCATTTCTC TCAATTTCTC CTGTATCCCA CAGGTTACAG GCACCAGTAA   420
TTCTGCCAGA GCTATTCTGA AGGGCACGTG GTGAAGGATT ATGGCTTGGA GCAGTGGGGA   480
GAGCCAAAAG CCCTTCCCAC ACTTGATGCA CTCCAAGGGT GTGATCCCAG CATGCAGCCT   540
CTCATGTTGG AATGGTCAAT TTTATCCTAA AATCCTCTTG CACTTGGAGC AATGTTGAGT   600
TATTTTCCCC ATGTGCATTC ACAGTGAGGT CCCCCTGAAG CCTACTCTTC TCCAGCCAAT   660
TTCTTATGAT CACGAAGGGG ATGATATGAT GGTGACATGG GGGATTTCCA CGTGGATGCT   720
GCAGGGCAGA TGGGGAAGGG GTGAGGGGAG ATGCCCACCA GCAGAGTTCC CAATCAGGAC   780
ACAGCAGTTT TGCTGCCAGC ACCAGGAAGC AGCTTCCCCT CCTTTCCCTG CTGGGAAATC   840
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TGCATCCTGC CTGCCTGCAA AGCAGCTGCT GAGATGTCTT TTGCAGCCCT TATTCCCGCA  1020
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CAAAGGGATG GGCACAACCA GCAATATGCA AAGGAAGAGG TGTCGAAAGT CTGGGGAGCA  1140
ATGAATCTGT CCCCCGGAAG ATGTTTCCAT GGGGCAGTTA AGGAGGAGAA TTGGAAATGA  1200
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AAGATACATA AAGGAGAAGG GCTTCTCGCT GTCTGGACGC AGTTCTGTTG GTTAACGTCT  1320
TTTCTCTTTG TGCTCTTTGC ACTTTTTTCT TTGCCTGCTC TGGTCAGGAT GAGGCAGAGC  1380
CCTCACGGGG CCCTTTCACA CCTTTTTTTA GCACACAGAA GCGCAGCGGC CGTCTCAGCA  1440
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AATTAAAAGT CAAACCCATC CCCTCCCAGT ATTCCAGCTG CCGAGGCATC GGTTGGCACA  1560
GAATCACCAA ATATTGCCTT TCTTCCCCCA TCCCCGCTTA TCAGCCAATG CTCTCTGACC  1620
CCTAAAAGGT CTCGATTTGG GGTCTTTTTG TTGTTGTTGT TGTTGTTCTG GGTATTTTTA  1680
GGCTTTTATT ATCAGCGATT TTTCAGCTTC TCACTGCTTA CCCCCCAGCT CAGCACCGCA  1740
TCGCTCACTG CCATCGCTGA ACCCAGCGGC GTTTCCATCC CTCAGAGAGC AGCAAAATGA  1800
GACATCGGCC GTCGTGCACG GAAGGGAAAG CTGTAGGGT ACATCTACCC TTATTTCTTG  1860
GGTTTGTGTT TTGTTTTGTT GTTATTTAGA AGCAAAACCA AGACAACAAA GCCCAGCCAA  1920
TGCCATTTCC TGGCAGTGGA CGCAGGCGCA GGCGGGTTGG TCACAAAGCA AGAAGTTGCT  1980
GCGGGACTTT GTCGTTTTGG GGCCGTTCTC GTGAACTTCT GAGCCATGGA TGAGGAAATT  2040
ACTTATGCTG ATTTAAGGCA TCCTACGGGC AGTTTGCCTC CTGCTAAGCG GCAGCGCGGT  2100
```

Figure 19a

B5FOR.txt

```
AAGGGATGCT CTGTGTGGTG GGTGCTCACC GCAGGCTTGG TTTGGGGGCT TGCTGTTCTC 2160
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AAGGAAGGGG TGGGGGAGAA GGAAGCCTGG GAATGGCCAG AGGTGTGGTG GTTTTGAGCA 2280
AAAATCAGCC CAGATCGGGA AGCCCAATGT GAGAGAATGG AATGAAATGG TGGCAAACGC 2340
ACCCTGCATC CACGTGGCAT GAGGGCTGCA GACATCCCCG CCCTCCCAGC CACCGGCTGC 2400
CCCACACTGG GCTCAGCTCA CAAAGCCTGG GGGCTGCTCA GCTTCCACCC CATGCTCTAT 2460
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ATCTGACCTC CAGCGGGAGC CCATCCCATG CTCCCTGCTG CTGTCACCCC TCTGTGCCAC 2580
CTCCTTCCCA GCTGGGAACC ACTGGGAGCC ACTGGGAAGG GTCCAGGGGA CCCTGGAACT 2640
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ATAGGAAATC CATCTTGGAG GGGACGGGGA CACAGGCAGG CTCACAGAGG GGACCCTGGG 2880
GTAGCAGTGC CGGATTTGGG CTGAGGCCCA TAGCAGTGAC CACAGAATCG GTCATTTGTC 2940
CGTTCATGGT GAAGATGGGA GGGGGTTCAG CAGAAGCACT CCCTGGGACT CCCAGAGGGC 3000
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CAGGATGTGG TTGCAGTGTG AACAAAGCCT GTGTGCTTTT ATAATTCTCT TCCTGCCTGC 3120
TGCTGTCATT TCTGAGGGCT GAATGGGCAG CACGGGCAGA CAGCAGCGTG GCTCCGACAC 3180
TTCTATGTCT GCAGTGCCCA TTGCAGGAAG AGAAAAGAAA TGGAGTGGGG ATGGGGCAAA 3240
CAGATGCATT CTGCTGAACA ACAAATCCGG TATTTTTTA TTGAGAGAAA TAACACAGGA 3300
TTGTGAGCTG ATTGCATGAG CGCATGCAGC GATGTCCCCC CGTGTGCCCG GCAGTGCTG 3360
GGGTCTGCAC AGCCCAAACT CCTCACAGAG CCGTATTGCA GAGCTTCACC CCAACGCCTG 3420
GGGCTTTTGG GGTGGGCACA CATCAGAGGG AGGGACTGCG TTGCCCTCCA TCTCCTGCAC 3480
ATTATGGATG GAGACGTAAA GGTTCTTTCT GGCAGACCCA CTGGTGTTCA CCACTACAGA 3540
CGTCGCCCTC CACTTTTGTG TTCTTGAAGG TCCCGCAGCG ATTCTCCATC ACGGAAAGGT 3600
TATCAGACCT GCAAAATAAG CTGTTTGCA CCCAAACACC CGACTTGAAG GAGGCGGGCA 3660
ATGGTTGCAG AAATACTCAC TCTGTGCTGT TGTAGGAGGA GTTGTCCACC CATTTCCATT 3720
GATTTGTGGA CACTTCTAAT CCAATCCACA CCGGCTCCGC ACCTGCCATC TGCTGGAGGT 3780
GATCCTGGGA AATGGCACCA AAATCCTTCT GCAAGGGGCT GGAGGGGTGC AGAGCCACCA 3840
AGTCTGCCTT GTTGGACCCC CAGCAGATGG GACTCAGACA GCAGCCATGC CTGGAATGCT 3900
GCCTGGCTCT GCAGGCGGCT CAATGGGTGG GAATGGCTTC AAACCCGAGA TGGAGGCACC 3960
GGTGTGACCA GCTGAGCTCT GCTTCCATCC TTCAGCCTGT TTGAAGGGTG GGAGGGGACA 4020
CAACCCCCAT GTCCCACCCC TAGCCTGAAC CTTGATGTCC TTAACTCAAA CCATAATGTG 4080
CGCAACCCCA GCGTGCCTGA CCCCAACCCG TGTGCCTACT GCCATGTGTT GACCCCTAAC 4140
CCTAAAGGGC ATAATCCAGA CCCCAATCTC TCCAGTGATG CTTTAGCCCC ATTTGGGTTT 4200
```

Figure 19b

B5FOR.txt

```
GGAACCACTG ACCCTCCTGC TGCCGCCCAG TCACTCCAGA GCGGTTTTCT CCCACAGAAT   4260
CCACCAAACC CACACATTTT CAGGTCCCGT CCAGCTCCCT GCTCTATGCT TACCTCTTCT   4320
GCCTTCTTCC GGAGCACAGC CAGCTGAGAC TGCAGATTTT CACACTTCAT TTTTGCTTGT   4380
GTCCAGTTCC CCTTTTCTGT GGAAAGCTCA TAGCATCGGT CCCCTAAAAG CCTCCAGAAC   4440
TGGGGACAGA GCAGGCAGGC AGCAGGGGCT GGAGAGAAAG AGCCGTGAGC ATCTTCAGGT   4500
GGGAGAAATC CCACCCAGGA GGATTTCCTT GGGAAGGGCA TTACCTGCAG AGCTGTTCCA   4560
TGTGGATTGG CAGAAGTACT GCTCAATGGA GGTATTCTCG CAGAGCTCTG TCCCATTCCT   4620
CCCGTTGGTC TCAGGGCAGT GCCGGGCAGC GCTTGGAGGT GGTGTTGTTT TCTGAAAGAC   4680
TTTTGGGCAC AACCTGGGGT GAGACGCGGC CCTATGGGGC CAACCCCGTG GAAACCACGC   4740
AGGGTTGGGG TTGGATCCTC GAGCTCTTTT GCAAAGCCTT TCTGGCTATG GTTGCACTCA   4800
GTTAATTAAA CTGTCTAAAA CCATATTTTG TATATAATTA GACATGATGT TTACTGCTTC   4860
TGTCCCCCCC TTGGTTTAAG AGCAGAGAGG CTCTTGCAGA AGGGAATTCC TCTCACTGAG   4920
TGCCACTTTG GAATTGTTGT GTGATCACCC AAACTCCAGT GCAAAGCCCC AGCCCACTT   4980
TGGGCAGAAT GAATGTGTTT TCTGCTCAGA AGAGCTTCGA TTTCCTGTGC AGCAATGTGG   5040
TTGGGATCTG ATCACTCACC GCACACGCTG AGCCCTGTCA CCAGCAGCAG CAGCAGCAGC   5100
AGCAGCACCC CCAGCATGCA GGCTTTCTGG AAGTCCCACG GAACTGGAAG AGCCCACACT   5160
TATATAAAAC AGACATTTTG AAAAAACTTT TCCTTTTACA GAAATGATCT CCCTGTGAAA   5220
GAGCCCCTCC ACCAACCTGC TACGTTAGAG CAGAAGTTGA TGGCTGCTTT GGTTCCTTGA   5280
GAATTTGGGG TCCCCGGACC CTTCCCATTG GTTCCCATGC TGTGTATGAG CAGAAGTTGA   5340
TGCCTGTTTG TTTTCCTCCA GTTCCGGGGT CCCCTGGACC CTTCCCAGTG GCTCCCAGTG   5400
GTTCCCAGCT GGGAAGGAGG TGGCACAGAG GGGTGACAGC AGCAGGGAGC ATGGGATGGG   5460
CTCCCGCTGG AGGTCAGATG GACACAGGGA CATCACCTCC ACGCGTGGTT CTGGAGGTGG   5520
TGGAGGCCCT GCAGGCTCCA TAGAGCATGG GGTGGAAGCT GAGCAGCCCC CAGGCTTTGT   5580
GAGCCGAGCC CAGTGTGGGG CAGCCGGTGG CTGGGAGGGC GGGGATGTCT GCAGCC       5636
```

Figure 19c

B5REV.txt

```
CCCAGAACCC AACCAGCATT GCTGGTGTTT CTCAGAGAAC AGCAAGCCCC CAAACCAAGC    60
CTGCGGTGAG CACCCACCAC ACAGAGCATC CCTTACCGCG CTGCCGCTTA GCAGGAGGCA   120
AACTGCCCGT AGGATGCCTT AAATCAGCAT AAGTAATTTC CTCATCCATG GCTCAGAAGT   180
TCACGAGAAC GGCCCCAAAA CGACAAAGTC CCGCAGCAAC TTCTTGCTTT GTGACCAACC   240
CGCCTGCGCC TGCGTCCACT GCCAGGAAAT GGCATTGGCT GGGCTTTGTT GTCTTGGTTT   300
TGCTTTTAAA TAACAACAAA ACAAACACA AACCCAAGAA ATAAGGGTAG ATGTACCCTA    360
CAGCCTTTCC CTTCCGTGCG CAACGGCCGA TGTCTCATTT TGCTGCTCTC TGAGGGATGG   420
AAACGCCGCT GGGTTCAGCG ATGGCAGTGA GCGACGCGGT GCTGAGCTGG GGGGTAAGCA   480
GTGAGAAGCT GAAAAATCGC TGATAATAAA AGCCTAAAAA TACCCAGAAC AACAACAACA   540
ACAACAAAAA GACCCCAAAT CGAGACCTTT TAGGGGTCAG AGAGCATTGG CTGATAAGCG   600
GGGATGGGGG AAGAAAGGCA ATATTTGGTG ATTCTGTGCC AACCGATGCC TCGGCAGCTG   660
GAATACTGGG AGGGGATGGG TTTGACTTTT AATTACGGCT GTCTATTCAG TAAGGCATTT   720
AATTTATTTG CAGTCCCTTC TCTTCCATGC TGGGTGCTGA GACGGCCGCT GCGCTTCTGT   780
GTGCTAAAAA AAGGTGTGAA AGGGCCCCGT GAGGGCTCTG CCTCATCCTG ACCAGAGCAG   840
GCAAAGAAAA AAGTGCAAAG AGCACAAAGA GAAAAGACGT TAACCAACAG AACTGCGTCC   900
AGACAGCGAG AAGCCCTTCT CCTTTATGTA TCTTCATTAC CAGAATTGCT TTTTCCCCCT   960
TTTCTGGGAT AGTTTCATTG CTGCATCATC TGCTTCATTT CCAATTCCCC TCCTTAACTG  1020
CCCCATGGAA ACATCTTCCG GGGGACAGAT TCATTGCTCC CCAGACTTTC GACACCTCTT  1080
CCTTTGCATA TTGCTGGTTG TGCCCATCCC TTTGCAAACC CATTCCTTGC CAACGGAGGA  1140
GAGGATGGAG ATGTGTGTGG TTCTGTACGG GGTCTGCAGG AATAAGGGCT GCAAAGACA   1200
TCTCAGCAGC TGCTTTGCAG GCAGGCAGGA TGCACTGATT CTTAGGGAGG GAGAGGTTAT  1260
CTGTGCGGGG ATGCAGAGTT TGGGCTGACC TGGAAGATCA GCCCTGTGCA AAATGTGGGT  1320
GAGCAGCAGA AAAAAAAAA AAAACATTC CAAAGGAGTG ATTTCCCAGC AGGGAAAGGA    1380
GGGGAAGCTG CTTCCTGGTG CTGGCAGCAA AACTGCTGTG TCCTCCATGG GAACTCTGCT  1440
GGTGGGCATC TCCCCTCACC CCTTCCTCAT CTGCCCTGCA GCATCCACGT GGAAATCCCC  1500
CCTGAAAAAG CCCATTTTGT GACCATGCAT CACATTATT TTCGCATTCA GCATCAGACG    1560
GACACAGGCA ATGGGTTGGG GGATGGGGGG GGGGTCTGAG GGTATATCTT TTTGCTGAGC  1620
CAGGTTTTGA GTCATGGGGG ATAATTTCAT TCCAAGGGGA GGGGGGCATT TAACTGCAGG  1680
TGGTAACAAT GAAAGGCAGT GGGAGTTGTT GTGATTGCAT GGGGGAAAGC ACTGGTTTTT  1740
TCCATAAATT GGGACTGATG TGGCTGTTGT TGCTTATTTT TATGGGGGAG GGTTGTGGGG  1800
TTTTTTTCCC CTATATTACA TTGCATTTAA TTTCAGTCCT CTCTCATTGT CTATCCCTGG  1860
CAATGCTAGG ACTTCTCCTT GCTGTTTTCT GTTGGGCGAT CATTGCCACA GAGGGAGGAA  1920
TTGCTTTTCA TTTGGGTCAC TGCAATGAGT TTTAGCACCC AGAAATATAT CCTTATGGGT  1980
CTCTGCTTTT GGGGCACTGC TGATGGGTGG AAGTTTTGGT TTGCAGGTGA AGTGGAAGCC  2040
CCAAAATGGA GGAAGTGAGG GAATATCCCC ATGTTTTGGG CACAGAATGG AGCAGGAGGG  2100
AAGGTAACAG CCGAGCCATG CCCTTAACAC ATCTGTTTAT TGTTATTATT ATTGTTATTA  2160
TTTTATTGAT TACTTCTTTA ACTTGAGAAC AAAGGGGAGG GATGTGGGTG GGAAGAAAAT  2220
GAGTCTCATT TCTTTTAGCA CTTCCCTCAA GGGGAAAATT TGTGTTGGTT GTTGAGCAGC  2280
AGGTGGACTT CTTGCTGTGA GCAGCCACAT TTTGGAAGAG TTCTGTTGTT ATTAGCATTA  2340
TTTATGCGAT CTGTGATGT TTTTATTATA ATTAATTGTA ATGAATCCTC CCTGAGGCAC    2400
TGGATGGGGG AAAAAAAAC AACATTTTGG GGTCTACTGC TCACACCTGG GGTGCACTGT    2460
TGCCCATTGG AGGTCCCTTC TCCCATAGGT CCCAGCCGTG GGGCATGCGT TACCTTCCAG  2520
CTCACGATGG CAGCGGTGTT CACAGTGCTG CTCATCACTG CTGTTGCCTT TGCAGGTGAG  2580
TGCTGAGGGT TCCAAAGAGC AGAGAAACC CTTTGGG                            2617
```

Figure 20

A52FOR.txt

```
TTCTCCCACA GAATCCACCA AACCCACACA TTTTCAGGTC CCGTCCAGCT CCCTGCTCTA   60
TGCTTACCTC TTCTGCCTTC TTCCGGAGCA CAGCCAGCTG AGACTGCAGA TTTTCACACT  120
TCATTTTTGC TTGTGTCCAG TTCCCCTTTT CTGTGGAAAG CTCATAGCAT CGGTCCCCTA  180
AAAGCCTCCA GAACTGGGGA CAGAGCAGGC AGGCAGCAGG GGCTGGAGAG AAAGAGCCGT  240
GAGCATCTTC AGGTGGGAGA AATCCCACCC AGGAGGATTT CCTTGGGAAG GGCATTACCT  300
GCAGAGCTGT TCCATGTGGA TTGGCAGAAG TACTGCTCAA TGGAGGTATT CTCGCAGAGC  360
TCTGTCCCAT TCCTCCCGTT GGTCTCAGGG CAGTGCCGGG CAGCGCTTGG AGGTGGTGTT  420
GTTTTCTGAA AGACTTTTGG GCACAACCTG GGGTGAGACG CGGCCCTATG GGGCCAACCC  480
CGTGGAAACC ACGCAGGGTT GGGGTTGGAT CCTCGAGCTC TTTTGCAAAG CCTTTCTGGC  540
TATGGTTGCA CTCAGTTAAT TAAACTGTCT AAAACCATAT TTTGTATATA ATTAGACATG  600
ATGTTTACTG CTTCTGTCCC CCCCTTGGTT TAAGAGCAGA GAGGCTCTTG CAGAAGGGAA  660
TTCCTCTCAC TGAGTGCCAC TTTGGAATTG TTGTGTGATC ACCCAAACTC CAGTGCAAAG  720
CCCCAGCCCC ACTTTGGGCA GAATGAATGT GTTTTCTGCT CAGAAGAGCT TCGATTTCCT  780
GTGCA                                                             785
```

Figure 21

H82FOR.txt

```
CTGCGCTGGG GATCTTGTTT TCCCCTGGCA ATGGGAACAG CTGTTGGGTG CCTTTTTTGG    60
GAAAGATCTC TTTATCGGTG CATGAAGAAT GAAGCGACTA ATGGGGAATG GAAGGAGTGG   120
TGGCTGTTTG AGTAATTGAC TGATAGGTTG ATGGAGGGAT ACTTGAATTA AGAGCTTTTG   180
GCTCTTATCT CATTGCCTCT GTGCACCAGG TTTGGAGTGG GCCAGGCCCT GGCACGGTCA   240
ACTTGCTCAC TGTTGGCAAT AGGAACATTT TTTGAGCCTC AGAGAGATTT TGTTGGAGGA   300
ATGGATGGAT CATTCATGTC CTGGTTTGTC TGGGGGGGAC CAATGTGATG GATTAATTTT   360
TTTCAGTATA AAAATAGTTT GTCAGGTGAA CTTCTGGTGA CTGAGTGGAT GGTTGGATGG   420
AGGGATGTGA GTTTCTGTGG AGGGATGGAT GGTTGGAAGG TTTGTTGGAT GCACTGTTGA   480
GTGCTGGTGG GATCTACATT TGGGGCAATG GATGGATGGA CTCTGAGAAT ATAGACTATA   540
GCTGAGTTGG CAATGACCAA GAAGGACCAT TGCGTTTTGT TTCTGGCTTC ATGTAGGATC   600
ACCCAGGAAT TAAACCCTAT GTCATGGTTT TGTAACTTCG CTATTGGTAT TCCACATCAT   660
AACATCATGG ACAAAAGAGA AGAATAGCAA AGTTACAAAA CCATGACACC CTACTTCTGA   720
AAGCAGTTTT GAAATGCTTG GGGAGCTGAA TGGTTGATGG TGTGGTGGAG TCGTGGGGGG   780
GAGGTGTCCC TGTGGGGCAG TCCCTGGGAA GCTATAGCTA TAAGTCACCC CAATGCCCCC   840
TCTGTGTGGG AGTAGTGTGG GTGGGGGTCA CTGGGATACC ACAGTGGGGT GGAGCCCAGG   900
GGAGTGTCTT TGAGGTCAGT GGGGGGTGAG CAGGGCTCTC TAGAGGCCTT TGGGGGGTCC   960
AAAAGGAGTT GATGAGAGAG AGAGTGTGGG AGATCCATGG GGGGGCTGCA GGCCTCAGTG  1020
CCCTCCATCT CTTGCCAGGT GCCCCAGGAA CACTATGGGT GGGGACACTG TGGCCCCGCA  1080
GTGCTCACCT GCATTGGGCA CCTCCCCATG TCCCCCCTGA AGGCTACAAC CTCATCTATG  1140
GACCCCCCGG TGGCCCCGTG AAGGTAATAC CCCATAGCAC TCCCTGAACT TCCCAGGGGA  1200
TCTCCCTGGG TATCTCCTGG GGTACCCCAA CCCTCCTTGG GGACCCTGCT CCCACCCTGG  1260
GGAATCCAAA AGTCCTCCAC CACCCAAGCA CCCTAAGAAC CCCACTGCAC CCCACTATCC  1320
CTTGAGGTCC CCAATACTCC TTTTACAGCA TTCCCATCCT CCTCCTTGGC CCCTTTATGC  1380
TCTCCAGAGA CATTAAACAC CCCTGTAATG CCCCTTAGGG ACCCCTGCAG CAGCCCAATA  1440
ATCCTCCCAT GTCTACCTCC AGACACTGCA GCTGCCCCCT GAAGCAACAT CCAAGGAGCT  1500
GTGGGGCCTG GAGCCCAGTG GACGCTATAG GGTGCAGCTC TGGGGCCGGG GGCTGGAGCC  1560
CCTTGAGACC ACCTTTGACA CCCGTGAGCT GGGAAGGGGG GTCCTGTGGG GTGGGAAGGG  1620
GCACTTGGGT GGAGGACTCT GGGATACCCA AATACCTGGA TGATTTGGGG TGCTGGGGAC  1680
ATATGGATGC TGGGTCCTGA AGTATGGAGG GGGGTACCAA GGAATCTGCA TCCTTGGGTG  1740
GGGAGCTCTG GGGGTTCCCA AGTACCTGAA TAATGGGTAC CTAGTTAGGG GAATGCCTTG  1800
GGGTGGGGGG GGGGCGGACA CAGCGGGATG CCCTCGTCCC TTGGTAGGTG AACAGGGACA  1860
CCCAACTGGT TGGGGCCACC TACACTGCTC TGTCCTTCAG CACCCCTCCC CCACCCACAT  1920
CCCCGGGACT GCGCTGAGGA GCAGCTCAAT GGACCGGGGC CTTCACGAGA GGTCCTCATC  1980
TTCCTCGGGG GCGACCGGCA GCGGCCACTG CACGTCTTCT GCGACATGGA GAGCAATGGG  2040
GGCGGCTGGC TGGTGGGGAA ACGGGGCGGT GGGGAGGGTG TCTGGTGGGC TCTAGGGGGT  2100
GCTATGAGGA GTCTGGTGGG CAATGGGGGT CACAGGGTGG GGTGGCTGAC TCCATGGTTG  2160
CCATTATAAG GGTTGGATTG GCAATAAGAG ACCTGTGGAG CAACTGGGGG CATTTGGGGT  2220
ATCTGGGGAG GTTCTGTGGG GGTTGAGAAG CAATGGGGGG GGGGAGTGGG GGAGGCTGGA  2280
AGATTTAGGG GAGGTTAATG GGAAGGTCTT GTGGGGCAAT GGGGTAATT CTGGGAACTG  2340
CAGGGGGATC CCAGTGTTCC TGTGAGATTC ACATACCCCC TATACTATCC ATGGGGATCA  2400
CAGTAACCCT CTGGAACTAT AAATGGGGGA GAACCCAGGG AGCAATGGGG GGCTGTGGTG  2460
GATCTGGGAG GGGCAATAGG GTGCCCTGGG GGGCAATATG AGGGTCTTAG GGTGCAATGT  2520
TGGGGGTCTA GGGGGAAGTA ATGGGGGGTC TGGGGGCAGT GGTGGGGTCT AGAGGGG     2577
```

Figure 22

Conti224.txt

```
GGAGGGAGCA CTCACCCAGG TCTGAAGCTA GTTTATCTGC AATGAAACAA ATAAGAAATG    60
CATGATGAGA AGGGTCAGAA TATCATCCCA TGGCTGATCC CATGGGAAGA CCCCGAATCT   120
CTTTGGTTTG CGGAGGAGGA CTCACCCAAC TGTGCATTCC TTCTCTCTGC AAAGGGAAAG   180
CAGAAACAGT GTGTGGTGAG AGGAGCAGCT CATCCCACAC ATCGCACAGG AAAACCCCCT   240
TTTTTATTTA ATTTGGAGGG AGGACTCACC CAGTTCTGAA GCTAGTTTCT TTGCTAAAGA   300
AACAGATAAG AAATGCATGA TGAGAAGGAT CAAATTATCA TCCCATAGGA ATACCCCAGA   360
TCTCTTTGGT TAGCGGAGGA AGACTCACCG AACTCTGTGT TTCTTCTCTC TACAAAGAA   420
AGGCAGAAAC AATGCATGAA GACAGGAGCA TCTCGTCCCA CAGCTCCCAA AGGAAAACCC   480
CTTTTTTGTT TAATTTTAAA GGCAGCACTC ACCCAGATTT TCAACTAGTG TCTCTGCAAA   540
AGAATCAAAT AAGAAATGCG TGATGAGAAG GGTCAGAATA TCATCCCATG GCTGATCCCA   600
TGGGAAGACC TTGAATCTCT TTGGTTTGCG GAGGACTCAC CCAACTTTGC ATCCCTTCTC   660
TCTGCAAAGG AAAAGCAGAA GCAGTGCGTG ATGAACTGAA CAGCTCATCC CACAGCTCAC   720
ACAGGCATCC CTCATTTTGT ATTTTGTTTG GGAGGGAGGA CTTACCCAGT TCTGCAGCTA   780
GTGTCCCTGA TAAAGAATCA AATAAGAAAC GCATGACGAG AAGGCTCAGG TTATCATCCC   840
ATGGCTGATC CCATGGGAAG TCCCCAAATC TCTTTGGTTT GAGGAGGGAG ACTCACCCAA   900
CTTTGCATCC ATTCCCTCTG CAAAGGAAAA GCAGAAACAA TGCATTATGA GATGAATGAC   960
TAATTGCACA GCTCCCAAAA CATTAAAAAA AAAAAAATAG TGGGAAGGGA AACTCATCCA  1020
CTATCGCAGG TAGTTCTGCT GGAAAAGAAA GAGCAGAGCA GTGCATGGTC AGAGAGGACA  1080
GCTGCTCATC CCACAGCTGA TGCCATGGGG AGACCCTGAA TTCCCTCACT TTGGGGAAGG  1140
AGACTTACCC AACTCTGCAT CTTTTCCCTC TGCAAAATAG AAGCAAAGGA AATGCATGGT  1200
CAGAGGGAAC ACCTTCTCAT CCCATGGTTG CTCCCATGCC AATACCCCCA AATCTTTGTT  1260
CTGGTAAG                                                          1268
```

Figure 23

Conti508.txt

MAR 0 9 2004

```
CAGTGACAGT GCAGGTGGAG GGACACGGCG AAGGGACGCT GACGGTGGGT GGCTGCATGG      60
ACATTGGTGT CATCTCCAAG ACCGATGTCC CCTCACAACC TCCCCTCATG GTGTCCCCTC     120
ATGCTGCCAC GGTGTCCCCT GCTGTCCCAT CATGGTGTCA CGCTGTCCCC AGGTGCTCCG     180
CCAGTTCCGC CTGCTGTCAC CTCCGAACGC CACGTGCCAG GCGCTGCACC TGGAGGTGGC     240
CATCACCGGC CCCATCCTGT ACCATGGTGA GGCCCCACCC AAAGGCCCCG CCCCCTTTTC     300
CTCGCGGGGG GCGTGCCCTC AACCCTGTTT TGCATATCCC AACCCCCAGC AGATGAGGAC     360
TACGAGGACT ACGAGGACTA CGAGGAGGCG GAGCCTAAGG AGGGGGAGGA GCCTACGGAA     420
GGGGCAGTGC CCGTGGAAGG GGCGGGGCCA GCAGATGACC CCGCCCCCCT CAGCCCCGTG     480
TCCTTATGGG ATGCCCGTAA GCGGCAACGC CGCAGCACAC ATAACCCTGC CCACGAGGTG     540
GCCTTCCTGG TCTGCTTCCG GTGAGGGGCG GAACTTCCTG TCCCTGGGGG CGGGTCTTCC     600
TGCTGATGGG CGTGGCCTGT TGTAGGCGGA GCCCAGGGGT GGCACTGACT GGGATGGCGG     660
TGGTGGAGAT CACTCTGCTC AGTGGCTTCT CACCCCATAG AGCTGACCTG GACAAGGTAG     720
GGGCCCAGGG GGACTTGTGG GACATGTTGG GGGGTTGAGG GGAGTTATGG GGTGTGGGGT     780
TTGGGGGTGT TGGAGTTGTT GAGGTGGCAG AATGTTTGGG TTGGAGTCAT GGGATATGGG     840
G                                                                    841
```

Figure 24

```
CCACTCTTGG GTGAGCTGAC AGCGTCCCAC GTCAGCCCCG ACTCCGTCCA GCTGGAATGG    60
AGCGTCCCCG AGGGCTCCTT TGACTCCTTC ACGGTGCAGT ACAAGGATGC ACAAGGCCAG   120
CCACAGGTGG TGCCCGTGGA CGGTGGGTTG CGCACAGTGA CCGTGCCCGG GCTGTCGCCG   180
TCCCGCCGCT ACAAGTTCAA CCTGTATGGG GTGTGGGGGC GGAAGCGTCT GGGCCCCATG   240
TCCACTGATG CTGTCACAGG TGAGCATGCT GTGTTCTGCC TCCATGTTCT TTTGCTTTCA   300
GTGTAGTTGT CATGTGGCAG GAACCTTTCA GGGCCACTTT TGGTTAATGT TGCCTTAATA   360
GTCAAGGAAA CAATTTGTTC TTGTTGAGTG GGAATGCCTA ACGGGATGGG AGTTTGGATG   420
ATGAGAGGAC AAATCTTATA AGGGATGATT GATAATTATT GCGGAACGGA TGGAAGGAAG   480
GTTGGATGGA TGGAATGGTG TTTGGATAAA TTTGTGCTCA GAGCACAGCT GGAGTGTTGG   540
ATGAATGTTG CTTTGCTTGT TGAATAGATG GATGTTTGGT TGTGTGGTTG CTTCCACTGA   600
GAATTCCTCC CTCTGTGCTG CAGCAGCAGC TCCAGCACAA GAGGAGCCAC CTTCCCCACC   660
ACGTCTGGGT GAGCTGACAG CGTCCCATGT CGGCCCCGAC TCCGTCCAGC TGGAATGGAG   720
CGTCCCCGAG GGCTCCTTTG ACTCCTTCAC GGTGCAGTAC AAGGATGCAC AAGGCCAGCC   780
ACAGGTGGTG CCCGTGGACG GTGGGTTGCG CACAGTGACC GTGCCCGGGC TGTCGCCGTC   840
CCGCCGCTAC AAGTTCAACC TGTATGGGGT GTGGGGGCGG AAGCGTCTGG GCCCCATGTC   900
CACTGATGCT GTCACAGGTG AGGGCAGGAA TTGGCACCTG GTGGGCTCTG GGTTTGCAGC   960
AGGTAGAAAT GTAAACGTGG CCTGCGCTGG GGATCTTGTT TTCCCCTGGC AATGGGAACA  1020
GCTGTTGGGT GCCTTTTTTG GGAAGGATCC CTTAATCGCA GCATGAAGTA TGAATGGACC  1080
AATTGGGTGT GGGTGGAGTG ATGGCTGTTG AGATGAGTTG GTGGCTGCTT GAGTAATTGT  1140
CTGTTGGAAT GGATGGACAG ATATGTGAAG GAGTGAAAGG ATGGATAAAG TAATTTAGGA  1200
ATCGGTGGAT GAAGAATGGG TAGGTAGACC CTTGGTGAAG TGGTAGAATG GAAGGATTTA  1260
TGAACAGATA TGAGTTAATT CTTGCATCGA AGTAGGTGTA AGTGTCTATT AGCCTGTTGC  1320
ACTGAACATG CAGTTGCATA GACAAATGAG TGGGGAGAAG TACGGAGTAA ATCCCTGCAT  1380
GAATGGTAGG ACAGAAACCT GAATGCCTGG ATGCTGGCAG TGTGAAGAAT GGCACTTGGG  1440
ATAGATGGTT CGAGTATGGG GTAGATTAAA AGATGGATGG AAAAGAGGAA CAGAGAGAGG  1500
GTGATTGGAT GAATGGATGG ATGGTTGGAT GTGACTGATT GACAGGTACC AAGCTTTTTT  1560
CCTGCACTGT GCCTTCTGTG CTGCAGCTGC AGAAGAGACG GAGGAGGAAC CACCGTCCCA  1620
GCCACGCCTA GGAGAGCTGA CGGCATCCCA TGTCAGCCCC AACTCCGTCC AGCTGGAATG  1680
GAGCATCCCT GAGGGCTCCT TTGACTCCTT CACGGTGCAG TACATAGACG TGCAAGGCCA  1740
GCCGCAGGAG CTGCACTTGG ATAGTGGGTC GCGCACAGTG ACCGTGTCTG GTTTGCTGCC  1800
ATCC                                                              1804
```

Figure 25

MAR 0 5 2004

MAR 0 9 2004

Conti534.txt

```
GCACAGAAGG AACCGCCATC CCAACCACGC CTGGGTGAGC TGACGGCCTC CCACGTCAGC   60
CCCGACTCCG TCCAGCTGGA ATGGAGCGTC CCCGAGGGCT CCTTTGACTC CTTCACGGTG  120
CAGTACAAGG ATGCACAAGG CCAGCCACAG GTGGTGCCCG TGGACGGTGG GTTGCGCACA  180
GTGACCGTGC CCGGGCTGTC GCCGTCCCGC CGCTACAAGT TCAACCTGTA TGGGGTGTGG  240
GGGCGGAAGC GTCTGGGCCC CATGTCCACT GATGCTGTCA CAGGTGAGCA TGCTGTGTTC  300
TGCCTCCATG TTCTTTTGCT TTCAGTGTAG TTGTCATGTG GCAGGAACCT TTCAGGGCCA  360
CTTTTGGTTA ATGTTGCCTT AATAGTCAAG GAAACAATTT GTTCTTGTTG AGTGGGAATG  420
CCTAACGGGA TGGGAGTTTG GATGATGAGA GGACAAATCT TATAAGGGAT GATTGATAAT  480
TATTGCGGAA CGGATGGAAG GAAGGTTGGA TGGATGGAAT GGTGTTTGGA TAAATTTGTG  540
CTCAGAGCAC AGCTGGAGTG TTGGATGAAT GTTGCTTTGC TTGTTGAATA GATGGATGTT  600
TGGTTGTATG GTTGCTTCCA CTGAGAATTC CTCCCTCTGT GCTGCAGCAG CAGCTCCAGC  660
ACAAGAGGAG CCACCTTCCC CACCACGTCT GGGTGAGCTG ACAGCGTCCC ATGTCGGCCC  720
CGACTCCGTC CAGCTGGAAT GGAGCGTCCC CGAGGGCTCC TTTGACTCCT TCACGGTGCA  780
GTACAAGGAT GCACAAGGCC AGCCACAGGT GGTGCCCGTG GACGGTGGGT TGCGCACAGT  840
GACCGTGCCC GGGCTGTCGC CGTCCCGCCG CTACAAGTTC AACCTGTATG GGGTGTGGGG  900
GCGGAAGCGT CTGGGCCCCA TGTCCACTGA TGCTGTCACA GGTGAGGGCA GGAATTGGCA  960
CCTGTTGGGC TCTGGGTTTG CAGCAGGTAG AAATGTAAAC GTGGCCTGCG CTGGGGATCT 1020
TGTTTTCCCC TGGCAATGGG AACAGCTGTT GGGTGCCTTT TTTGGGAAGG ATCCCTTAAT 1080
CGCAGCATGA AGTATGAATG GACCAATTGG GTGTGGGTGG AGTGATGGCT GTTGAGATGA 1140
GTTGGT                                                            1146
```

Figure 26

Conti547.txt

```
CTGTGTCCCC AACCTGCTTG GTGTTCCCGC AGGACACGCT GGTGGCCCTG GAGGCGCTGG    60
CCCAGATGTG GCTGCACTGG GGCCGTGGGA ACACAATGGG GCTGAACCTG GGGCTCTCCT   120
GGCCGGGGGG TGCCCGGGGG AGGGCTGGTG GCACTCAGGT TATGCTGAAG CCGGGGCTGG   180
AGCCGCTGGA GCAGGAGCTG CAGGTGGGGA CATGGCGGGA TGTGGGGACA CGAGGGATGT   240
GAGGACACTG GGGACATGTC TGGACTTGGT AGGATGTAAC ATGAAGACAC TGGGGACATG   300
GTAGGACATG GGGGACATGA GAACACGGGA TGTGGGGGAC ATGGTAGGAC ATGATGGACA   360
CAGGGCTTTG GGGTCCTTGG GTCCTCGCTC TGTCCCCATG TCCCCAGGTG CCTCTGGGCA   420
GCCCAGTGAC AGTGCAGGTG GAGGACACG GCGAAGGGAC GCTGACGGTG GGTGGCTGCA   480
TGGACATTGG TGTCATCTCC AAGACCGATG TCCCCTCACA ACCTCCCCTC ATGGTGTCCC   540
CTCATGCTGC CACGGTGTCC CCTGCTGTCC CATCATGGTG TCACGCTGTC CCCAGGTGCT   600
CCGCCAGTTC CGCCTGCTGT CACCTCCGAA CGCCACGTGC CAGGCGCTGC ACCTGGAGGT   660
GGCCATCACC GGCCCCATCC TGTACCATGG TGAGGCCCCG CCCCCTTTTC CTCGCGGGGG   720
GCGTGCCCTC AACCCTGTTT TGCATATCCC AACCCCCAGC AGATGAGGAC TACGAGGACT   780
ACGAGGACTA CGAGGAGGCG GAGCCTAAGG AGGGGGAGGA GCCTACGGAA GGGGCAGTGC   840
CCGTGGAAGG GGCGGGGCCA GCAGATGACC CCGCCCCCCT CAGCCCGTG TCCTTATGGG   900
ATGCCCGTAA GCGGCAACGC CGCAGCACAC ATAACCCTGC CCACGAGGTG GCCTTCCTGG   960
TCTGCTTCCG GTGAGGGGCG GAACTTCCTG TCCCTGGGGG CGGGTCTTCC TGCTGATGGG  1020
CGTGGCTTAT TGCTGAGGGG CG                                          1042
```

Figure 27

Conti548.txt

```
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AGCATCAGAT GGGCAATGGA TGCAGCAGCT CCGTGGGTCG TGGAGGTGGC ACGTGGCAGG  120
AGCGAGGACG GCTCGGAGAT ACCGAGGTCA TCAGCCACCG AAACCATCTC AGGAAAGGGA  180
ATTTCCACAC AAAACTCCAT TTGGAGCACC TGGCAGAGAA GCTGAAGCTT TTGGAGCTGG  240
ATGGAGACAG AGGGGAGAAG GAGAAACTCT GCTCGTGGCG CAAGAGGACA TTCCCCTCCA  300
ATGGACCACG GGATGATGGA GGTCCCACTG GAGCCCCCAT AAAGGAGTCA GTGCAGGAGG  360
ATGTGGTCAG CCCTGTGTTA TTCCCTAAAG CCCTGTTTAA TCCTTCATGT CCATGCTGAA  420
AACTTCTTCT CTGCGAAGTC CAACACATTG CATCTCTTCC CTTCTTTCTC CCATCACAAT  480
ATCCTCCCCA AACCCCTTTT TCTTCCTCCA GGAGCAGATT CACAGCGATC TGGAGAACCT  540
CAAGAAACAA AAGGAGGAGC TCTTAGAACT CAAAAGGAGT GGGGAGAGGC GATGCCAAGA  600
CCTTCTGGTA AGAAGCTGTT GCCTTCAAGC TGGAAAAACA GAGGTCTTTT TGGGGTCCAC  660
GTTGTTGATT TTCCACAACC TACAGACACG GACGGAGGCT GAGAGGCAGA AAATTGTGTC  720
AGAATTCCGT CAGCTCCGCC GTTTTCTGAA GGAGAAGGAG ATGGTGCTCG TGGCACGGCT  780
GGGGGAGCTG GACAGGGCTG TGCTGAGGAG GCAGGAGGAG GAGGAG       826
```

Figure 28

Contig51.txt

```
AGCCCAGCAC TCTGCAGTCT TCTATCAGTT CCAATAGAGG AATTTTGGTG GTAGAAGGGG    60
CTGGAAGGAC TCACTCTGCT TTGTGGTCTC AGCTGCTGGA AAACAAAGCA GAGAAATAGC   120
TGGTCAGCAG GGCAGCTTGG TTTCTGGGGA CGTCTCCAGA GGGTCTGGAC CTTTCCACCT   180
GCCCCACGGT CCACCCACAT TCCTATCTTT CCGCCCACAC CCCTTTTTCC CTTTCCTTCA   240
TTCCCAATCA AACGGCAAAT GTTATTTAAT GACCACTGTC AATCCCCAGA AAAATCTCCC   300
TTTCTCCTGC ATACCTCCAC GGACCTGAGC TCAGCACCAC CCCGACCATC CCTATCCCTG   360
CTCAACACCT CCCTGTGATC CATCCCCTCC ATGCTCAACT CACCTTTCTT CCTATAGAGA   420
AAAACAGTGA TGACAAATGA CCCAACCAGA ATTGTGACGA TCACAGCCAG AGCCACCTTC   480
CAGGGATGGG TGATCTGGGA AAAGGGGTCT GGAAAAAACA TCAGGACAAG GGTTCCTTTT   540
CCATTCCCAT AAGTGGAAAA GCAAGACTCA GCCTTGGGAC ATCACAGAAC CCAAAGGGGC   600
AGCAACCAGG GAGCAGTGAT GCACAATGAC GGCATCCCCA TATTGGCACA GGTGGAGGAG   660
CTGCTCAGCA TCGTGTGCCC ACTGCCACTG AGCCATGGAG AAACCCATCC CAGAAATCCA   720
ACCCAACCAC CTCATCCATG CAGACTTATC CACAAATTGC ACTGTGCACC TGCTCCAACA   780
CCAGCATCTC ATGGAACAAT TTAGCTCCGA CCTCTTCCAA AGGCTGCTGT CCTTCAGCTT   840
TCCATCCATG GATGTGAGGA TGAGGATGGA CAGAGGTCGG GGTGGGACAC ACAAACCCAG   900
CAACACCTGG AGGCGTCACC CCAGCCACTG ACCTGACACC TCCAGGTCCA CCACAGCGTC   960
TGCA                                                               964
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Figure 29
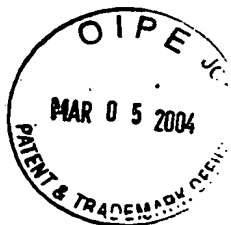
Contig99.txt

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GTTCATTATG CGGCTTCCTT CTGTGGCTGG TGGGTTTTGG TCTGGCTGTG CTTTACTATT   180
GGCGGCATGC TGGCGCGCTT AACGCTTTCG GCCTGGTATC GGGTTATCTC GTCTCTGGTC   240
ATGATGGCCT CCGATTCCAG GCGCGAATTG CATCGCGCTT TGTTGGATAG GTGTCAGTTA   300
TCGGCTTAAT CAAGCATTGC TTTGTTGAAC AACCGGCGTA GACACCATCA CCATCAGAAA   360
AAAGTTCTGC GCCGCCGCCA CAGAACGGAC ACTCAAGCAG AAAAGCCCAA TGAGGTAGCT   420
TGAGATCGAA TATCATTGGT TTCATGCTGC CTCCCGCTGT TTCAGTGCTT TGAGCTTGTC   480
GCGGTACTCA TCCCGGATCC GGATGAAGTC TTCACGGCGG TAGTTGGTCA TTTCGTGGGG   540
ACCATTGAGC CAGTTGACGT ATCCCTGACC GTAACGAGCG ACCAACCCAG CTTCGTATTG   600
CTGCGCCACG GTCGCCTCTT TGGCGGTGTA CTTGCCAGCT CCGGCATTAC AGGATTTGCA   660
CTGCTTATGG GCGTTGCGTT CTTCAAAGCG CAGTTCAGGG TAAGCACCTA CTGTCTTGAA   720
ATGGCCGCAA TCCCACTGGC CACCATGCAG ATCAGGCGGA TTGGTCTCGC CGCAGCTGAT   780
GCATGGCAAA TCGGCGTCGC GCGCACGGAT AAAGGCGTTG AAAGCTTTCT GAGCCTGAGC   840
CTTGTAGTAT CCGTCTGGCC TGAGCTCTGC CAGCCGCTCC TTGCGGCGTT TGCGCCCGTC   900
CTTTTCAGCC TCTTTTTGCT CCTTGATGCG CTTAGCCGCG GCTTTCACCT TCTCCTTCTT   960
GCGTTCTTCC ATTGCGAGGA TTGCGCCATG CTCCGGGG                           998
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Figure 30
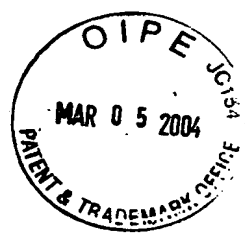
ContigB5.txt

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GTATATAATT AGACATGATG TTTACTGCTT CTGTCCCCCC CTTGGTTTAA GAGCAGAGAG   180
GCTCTTGCAG AAGGGAATTC CTCTCACTGA GTGCCACTTT GGAATTGTTG TGTGATCACC   240
CAAACTCCAG TGCAAAGCCC CAGCCCCACT TTGGGCAGAA TGAATGTGTT TTCTGCTCAG   300
AAGAGCTTCG ATTTCCTGTG CAGCAATGTG GTTGGGATCT GATCACTCAC CGCACACGCT   360
GAGCCCTGTC ACCAGCAGCA GCAGCAGCAG CAGCAGCACC CCCAGCATGC AGGCTTTCTG   420
GAAGTCCCAC GGAACTGGAA GAGCCCACAC TTATATAAAA CAGACATTTT GAAAAAACTT   480
TTCCTTTTAC AGAAATGATC TCCCTGTGAA AGAGCCCCTC CACCAACCTG CTACGTTAGA   540
GCAGAAGTTG ATGGCTGCTT TGGTTCCTTG AGAATTTGGG GTCCCCGGAC CCTTCCCATT   600
GGTTCCCATG CTGTGTATGA GCAGAAGTTG ATGCCTGTTT GTTTTCCTCC AGTTCCGGGG   660
TCCCCTGGAC CCTTCCCAGT GGCTCCCAGT GGTTCCCAGC TGGGAAGGAG GTGGCACAGA   720
GGGGTGACAG CAGCAGGGAG CATGGGATGG GCTCCCGCTG GAGGTCAGAT GGACACAGGG   780
ACATCACCTC CACGCGTGGT TCTGGAGGTG GTGGAGGCCC TGCAGGCTCC ATAGAGCATG   840
GGGTGGAAGC TGAGCAGCCC CCAGGCTTTG TGAGCCGAGC CCAGTGTGGG GCAGCCGGTG   900
GCTGGGAGGG CGGGGATGTC TGCAGCCCTC ATGCCACGTG GATGCAGGGT GCGTTTGCCA   960
CCATTTCATT CCATTCTCTC ACATTGGGCT TCCCGATCTG GGCTGATTTT TGCTCAAAAC  1020
CACCACACCT CTGGCCATTC CCAGGCTTCC TTCTCCCCCA CCCCTTCCTT TACTCCCCCA  1080
TACAAGCCAG GGTGGACCCA GAACCCAACC AGCATTGCTG GTGTTTCTCA            1130
```

Figure 31

COSMIDE.txt

```
CCGGCATCAC  CGGCGCCACA  GGTGCGGTTG  CTGGCGCCTA  TATCGCCGAC  ATCACCGATG   60
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CAGGCCCCGT  GGCCGGGGGA  CTGTTGGGCG  CCATCTCCTT  GCATGCACCA  TTCCTTGCGG  180
CGGCGGTGCT  CAACGGCCTC  AACCTACTAC  TGGGCTGCTT  CCTAATGCAG  GAGTCGCATA  240
AGGGCATCGG  TCGACGGGAT  CACGTTGTGT  CCCTGAAGCT  CTCCTGTACC  CAAACACAAA  ·300
GGTGATGTCC  CCAGCATCCC  TATCCCAGCA  CTCTGGGGGA  CTCCTATTGA  ATTCCTCCTT  360
GGGCTTGCTG  CCTTCTCTTC  CCGTTCCCAG  AGATCCCAAA  AGGTTAAGCA  CCTTTGGGTC  420
AGTGTTCAGA  ATTGTCACTG  CCAGTTTTGG  GGTATCAGTG  GCAAATTGAG  ACCCTTTTAC  480
CCAATCTTGC  ACCACTCTGG  TTCCCCAGTC  TTATGGTTTT  AGATGGAGTA  AAAAGGTTTA  540
TATGTCATAA  AGTTCTTCTG  TGTCTGGTTA  TTCGCTGCTT  CTGGATGCCA  GGATCATGGG  600
GATAAGGGGA  AAACAATGGG  TTCTCTTATG  CGTAGAGATG  CAATCAGATG  GGGAGAAAAA  660
GAAATCTTAA  TCTTTCTGAT  CCATCTGACA  GATATTCAGT  ACAGCCCTGA  GGATGTGGGA  720
AATAAATCTG  AAGAGTTTGT  TGGCAGTTCC  AAGGATTTGG  AATGACTAAA  TCCCATTCCT  780
GGTGTCTGCA  CAAAGTTGGC  TGTGTTGGAA  CCCAGAAAGA  TCCATGCAAG  TGGGTCATCC  840
CTGAAAGCAT  TGTGTTCTGC  TGTCTGCTAG  CGGAGAGAAA  GACACAGAGG  GGAAAATTAA  900
GTGTTTTATT  GTTAATTATT  GTACACTCTG  AGGTTTCAAA  TACCAAATCT  TTAACGAGAG  960
CGGACCACTT  GATTTGAGGG  TGACCATCTC  AGATGGGGAC  AACTGTACCT  GATCAGGCAA  1020
ACCTGGGGGA  AATTTGCCTT  TCTGCCACTC  TTTTGGGTGG  GATTTTCCCT  TTTGACCACC  1080
ATTTTCTACA  TTCTAATCAC  CCATTGCAGC  ACTTCTCCCC  CTTTTTTTTG  CCCCATTTTT  1140
CTCCTGCTCA  GCACTTCTTA  ACAATATAAT  ATAAATCAAT  ATCATATCAA  TATGATTCTA  1200
TGCCAATAGA  TTAATGGGGA  TGAAAGACAC  ATAAAAACCC  AAGTCCTCAT  TTCATCTGCT  1260
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TGTCTGTGTC  TCAGGGACAC  AGCCTCAGCT  TGGACCTGAC  CCCTACCACC  CACAGCCACG  1380
GACGGACCCT  CTCCCCAGAG  AAGGATGCAT  GGGAAAAAAC  AAAGATGAGC  CCCCCTTCAT  1440
CAGCATCAAA  AAATGCCACC  GTCCCTCCAG  CGTAGTCCAA  GTGGACGCTG  ACCCTCCTGG  1500
GCACCCAGCG  CAGAGCTAAC  AGGGTCACCT  TGTGGGTGGT  GAGTGCCCGG  ACCTGTCCCC  1560
CCCATTTCTC  CACCCCCCAA  ATCCCCCCTT  TGGGACAGAG  GCTGAGTTGA  CCCTTCCGAG  1620
GGATGGATTC  TCGGGCCACA  CCGATGGCCC  AGTCCCCTTC  ATCCCCCACT  TCCACCTCCC  1680
AGCAGTGCCG  GCCGGCAGAG  AAGCTTTGGT  GGCCCAAAAC  AAAGGGCCAG  TAGGCGAATC  1740
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CGGAGAGGAT  GAGGTCAGGG  TGAGCGGTGT  CGGGGTCCAG  GGTGATGCTG  GCTGTGGGGT  1860
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GCTTGGATCT  CCAGCACTAA  AGGAGTTGGA  TGTGCTCTAG  ATGGCCCCAC  CTGAGTAGGG  1980
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```

Figure 32a

COSMIDE.txt

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GAGCTGTTTG AGTGGGGGTG GACCTCTTGG GTCTTCCAAC ATGTGCCCAA TTTTGACTTT  3360
AAGTCATAGA AAAAGTGAAT TGTTTGACTG GGGATGGATC TGTTGGGTCT TTCAACACAT  3420
GGTCCATTTT GTCTTTAAAT CATAGAAATA AAGAATTGTT TGACCAGAGA TGGACCTCTG  3480
GGGTCTTCCT CCACGAGGAA GGTGAACCAA CTGAGGAGCA TCCATGCACG GCAATGAATC  3540
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GACCCCATGA GGACCTTCTG CAGTAAGGTG AAAATACTGG GAATACTGAG ATGAGGATAA  3660
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TCCGAGTGCT TGGCGGTGCT TTTCTGCCTC TTCTCAATCT CATTTTTCAG GTCTTCCAGC  3960
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CTCAGCTTTC CTTCTGATGC AGAAAGTGGA AAATAAAGAG CAGTGGGACT GGAAATACCA  4080
GGGGGGACTC ATGAGTGGCA TCCCCCACTG GAGGAGCTCA ATGGTGAGCT GGAATCCTTG  4140
CTAAGTTTTA TCGAATGTGG GGGACAGGAG GAAGAAATCA AACTCAAAAA GTCATGAACA  4200
GGTGGCTGTG AATTCGGGGC AGAAAGCTGA GGGCCCTAAA AGCACAGGAG GCAAAAAGGA  4260
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GGAAACCCCT GATATCCCTC TGAGTTTCTT CCCCAGTGAA CCCACAGAAC CTGTTGTTTT  4440
CAGCCCTTTG ATGGGGTTGG GGTTTTCCCT TCCTGTTCCT TCCCAGTCTG GGGTAGAGCT  4500
ATGGGATGGC TGCGTTGAGC CTGCAGGTCT GCTCCTGGTG GCACCCTTGG CAGGGCGTGC  4560
TGGGAGCTCT GGGTTTGTCC TTTGTCTTTC TCCCAGTTCC TTGTCCCGGG GAGATGCTGA  4620
ACAATGTCAC TTTGCAGATT TTGTCAGCTT CCTTTTAGGA TCGAGCCATC GGGAGTGGGG  4680
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AGAATAGACC CTGAACAGAT CCTTCACCCA AATTCCCCAG CAGGTGGGAC CAAATGGCAG  5340
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```

Figure 32b

COSMIDE.txt

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CTTGGTTCTA CAATCACCAA CCTGTGTGTA TTTTGGTGCT GCCTGTTCCT CTTTTGGGCT   5580
TTCTCAGAAG AAAATGGGTT TTTGAGGGAA TCCATTCAGG TGAGTCCTCA CCCCAAGCAG   5640
CTCTTCTTCA CTTTGTTGGC CCAAAGCTGA CCCAGAGCCA TACACCCAAA GCAAACCCAG   5700
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GAAAGGCCGC ATACCTTTGC AGGACACCCC AGATCTGCCC CACGATTGAT GTCAAATAGA   5880
TGCATAAATT TCCTTCCAAG TCTTCAGTGC TCTCTGGTGG TTTCCCCACC CTGCAGAGGG   5940
ACCGCCCCGG GGCTCCCAAT GGGGACAGAC ACAGGGCAGA GCAGCGGGTC CCCTTGGCAC   6000
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CCCAGAAATG CCTCCCCGAG GTGAAGCCCT GGCAGCCCAA CACGCAGGGC TCGAAGCTGA   6540
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TTTCCCAAGA AAACCACTCC CCACCCCACA TCCACCACTG CTGACATACC TGGCTCTTGC   7140
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AGGAAAAGGG GCTGGGAGAT GGGGAAGGGA AACCATGGGG GTCTGGGGGC TTCGCAGTGC   7260
AAAAGCTCTG GGTTTACTGC AAGAGCCCCA CGACCCTCCC AGACCTGGAG GAGACCCCGA   7320
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AAGTCCTCCA ACCTTCTTTC CAGAGTGGGG GAAATCTCTG CTGGAGGGCT GAACTTCATC   7440
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Figure 32c
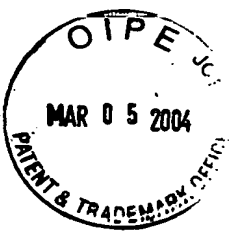
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CCAATGGGAA CGTAACAACA GCGCCAATGG GAACGTAACA CCAGTGCCAG TGGGAATTTA  8340
TCACCAGTGC CAATGGGAAC TTAACATCAA AAAGCCAAAG ATCATCTTGC TGGGCATTTG  8400
GGAGCAGCAG GAATTTTTCA GGAGTTTTAT CCCAAAAGCA AAACCAAAGG AGGGGGTAGG  8460
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AAGAGCAAAG CATCAAAGGA AGGAGAGGGC AGTAATGTTG CAAAGGGCTG ACGGCGGTGG  9240
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Figure 32d

COSMIDE.txt

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Figure 32e

COSMIDE.txt

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Figure 32f

COSMIDE.txt

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Figure 32g

COSMIDE.txt

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Figure 32h

COSMIDE.txt

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TGGATATACG TACCCCCCAC TGATACCCAT TTCCTTTGTT CTGTCCTTAT ATTTATACTT  24180
CCCCATATTT TGAACACATG AAAACAAAGC CCACATTAAA TAAATTCATA AACAGTGCAA  24240
TTTTTGGACT ATTATTTTCC ATAGAAAGT ATTAAATCAG TGCAGAAGTG CCTCTGGAGG  24300
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Figure 32i

COSMIDE.txt

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Figure 32j

COSMIDE.txt

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Figure 32k

COSMIDE.txt

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Figure 32*l*

COSMIDE.txt

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Figure 32m

COSMIDE.txt

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GAGAGGCAGA AAATTGTGTC AGAATTCCGT CAGCTCCGCC GTTTTCTGAA GGAGAAGGAG    37740
ATGGTGCTCG TGGCACGGCT GGGGGAGCTG GACAGGGCTG TGCTGAGGAG GCAGGAGGAG    37800
GAGGAGGCCA AGGTGGAGGG GGACATTTCT CTCCTCGGCA TCCTCATCTG TGAGATGGAG    37860
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Figure 32n
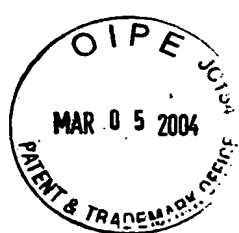
COSMIDE.txt

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GGAGATTGAA CCATTTTTTC CTATCTCTTT CAATTCCAGG ATGCCAGAAG CACGCTGAGC   38040
AGGTATGTGC TCCTTCAACC TCATTCAACG GGGTGGAAAG GGTTCCCCAT CCCCACACCC   38100
ACGGATTCTA GCACAGAAAT GAGAAATGCA TGTGATTGAG GCAAGGTTGG AAGTCCCATG   38160
GGGGTCAAAA AGTGCCTCAG TGTAGGAATG GCCCAAGAGA AAGACCTCGT GGCCATTGGG   38220
GCGACCCAAG GGACCGCATT CTGTACGGAG CAGGTTGGCA TCCCCAAACC TGTGACAAAG   38280
GGACATTCTG GAGCCAACCA CCTCAACCTC CATCCCCACA TCACCAGAGA TCCCCACACT   38340
CATCACCACC AGTCCCAGCA CTGATGAGAT TTGTGTCCAG GTGGGAGAGG GGCAGAACAC   38400
GAAGGATGAC AGAGAACTTT GCAGACGTGG AACGGAGGCT CTGTGTCATC TCCCAGCAAC   38460
ATAAAATCCT CAGGGAGACG TTGGGGAGAT TCCAAGGTAT TGTGGACCAC AGTATTCCTA   38520
CCACATAGGA TTTGCTTTGT ACTGAAGGTT GGGGGGTTTT TTGGTCGTTT GAATAGGAGT   38580
TGTATACACT ATTGGAAAAC AATTTGCATT AACTCACACT ATCAATCATT CTTAGGCCTA   38640
AGAGCATCTG TTTTTTAGGA CCAAATCCCA CAGATCCCAC ATAAAATCCT GCACAGATAT   38700
CCATGATAAA CATGGTGGGA ACTGAAGCAG GCAGATGTGG GACATGACAT CCAACCTTCT   38760
GTTCATCCCC AGATCTTTTT CTATCTGAGC TGGAGAAGGA GGAGGGAGCA TCTGTAGGAG   38820
AAGAGGGAAA AGGTGAGTCC TTAAAGCATT TTCCTTTTGC TCCATTGGTC ATTTTTTTAG   38880
CCAAAATACT GCGTCAGAGC ATCTGGAAAA TGATGGTTTT GAGCTCATTT CTGGTTTCCT   38940
AAAGGTGATA TAAAGAAGCT TTCCTATATT TCAGCAAAGG TTTTCTGAGC TGGAAAATAT   39000
GGAGACATCG CTGATCCCAA AGTAGATTTG GGGTGCTGTT CCAGCTTTAG GGTGATGCTC   39060
ACCCATTTCT TCTCCATCCC CAACAGCGTT TGTCACCCTG GACCCCACCA CTGCCACTGC   39120
AGGGCTCGTC CTGTCCCGGG ACCGACGTGG GGTGAGATGG ATGGATATGG GGCACAACAT   39180
GTCCCCTTGT CCCCAACGCT TCGATGTCTC CTGCTGTGTG CTGGGCTGTC GAGGCTTCAC   39240
CTCAGGGTGG CACTTTTGGG ATGTGGAGGT GATGGGTGGT GCCACGTGGG CACTCGGGGT   39300
GGCACGCAGC TCTGTGCCCA GGAAGGGTTG GCTCACTTTC CACCCCGATT ATGGGATTTG   39360
GGCTATGGGA TGCTGTAGGA ACAGCTTCCG AGCTTTCACA TCTCCCCCAT CC           39412
```

Figure 32o

D12FOR.txt

```
GGGGGGCGAT ATGGGTGGTG GGACATGAGG GGGCCGGGGG GGGTCGGGTC TCACCCGCCA   60
GCAGCAGCCG CAGCCCCGCA GCCATTGCTC TCCGCTGCTT TCGCTTTCGG CTCCGCTGTG  120
GCCCCACCCC CTCCGTCACT TCGTCAATAT TAATTTTAAA TCCCTGAAAC CCATTAAAAA  180
AAGGGTCGGA GAGGGAAAAC TCATTCAGGA ACAGTGTTGG AAGAGGGGAC ATGGGTGGGA  240
CAACCCGGCT TTCCCCACAG GCCGACCTAA ACACAGCCAC TGCCACCCAC CCCGGATCCA  300
TGGGTGACGT AAGGATGAGG TTCCAGCACA TATTGGACCC TTCTGCGTTT GCATGG      356
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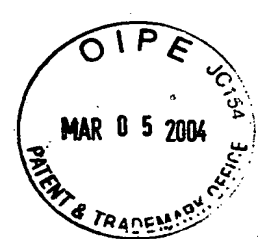
Figure 33

D12FOR.txt

```
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GCAGCAGCCG CAGCCCCGCA GCCATTGCTC TCCGCTGCTT TCGCTTTCGG CTCCGCTGTG   120
GCCCCACCCC CTCCGTCACT TCGTCAATAT TAATTTTAAA TCCCTGAAAC CCATTAAAAA   180
AAGGGTCGGA GAGGGAAAAC TCATTCAGGA ACAGTGTTGG AAGAGGGGAC ATGGGTGGGA   240
CAACCCGGCT TTCCCCACAG GCCGACCTAA ACACAGCCAC TGCCACCCAC CCCGGATCCA   300
TGGGTGACGT AAGGATGAGG TTCCAGCACA TATTGGACCC TTCTGCGTTT GCATGG       356
```

Figure 33

E1REV.txt

```
GTGGGGGGCA GCGTCCGCGC TGACCTCGTC TCGCTGTGTT TCAGGGCGCC CCGTCGCCGC    60
CGCTCCAGGT AACGTCCCGT TCCCATTCCC GTTCCCGTTC CCGTTCCCGT TCCGCGCTGC   120
GCGGAGCGGC CCCGATCCCG GCGCGGGGCT CAGCTCTGCC CGTCTCCCCG CAGGGATGCT   180
GAATTAGCTG CTGCCCCGCC GAGCCGCTGC ACCCGCACCC CCGCTCTCC CGGCCGTCGC    240
CTCGGCTCTC CCTCGGGCTG CCACCGCGTC CGTTGGAGAT GTCGCCACGA TGCACGCTTC   300
GTCCCCATCC TAATAAACGC GCTGACTTTG ACCCCGCTGT TCGCTGCCCG TGAATCATTG    360
GGGACTTTCC GTCGCGTGGG AGGAGGGGAG GGAAGTGAAA GCTTCGTGGA GAAGTAAACC   420
CAGCACCCTA TGGGTCCCAC GGGACGTGGA TTGGTGGGGA TGGGGTGGGA TTGGACTCTT   480
GGTGGTCATT TCCACCCATA GGGAGCTCGC GGCCACCCAG TGGTCCTCAT ATAGACTCCA   540
TGGTCACACC ACTGTCACCT TTTGGTCACC CCATGATCCC TGTGTTACCC TCCGGGGTCC   600
CTCAGTGGTT ACCCCACGTT CCCCCAGAGG CTCCTCCTGT CGCCTTCATC ATCTCACCCC   660
ATTGACCACA TACCCCCCTC CCCCTATGGA TAACCCAAAG CCATCACCAG TGGTGTTGGG   720
ATGCAAACAC GGGGCCCCGG ACCTGTCCCT ACAAGCACAG GGTGGTGACA CAGCCCAGAC   780
AGTGATGCTG TGTCATTTGT CACCAGGCAG AGGACACACA GCCACAGCCT GGCTCAACTC   840
GAATAATATT TTCTTTATTT ACATGTTAAA GAATCGAAAG GTTGGAAACA TACAGTAAGA   900
TGAAAACACG GCTCTAAGGG TCTAACAGTG GGGCAGGAGG GTGGGGGGGA GGAAAAAAAA   960
GAAAAAAGGG AAAGAAAAAA CCAAAACAAG TAGAAAAAAA ATGATACAGT CAACGTAAAA  1020
AAGGGGTGGC CCTCCCTCCC CCAGTGGGAA CATGCGGCGC TGCGTGCCGG GGGGTTTTAT  1080
GTACAGGGGC CGGGCAGCTC CAATAAATTA AAACCTCCAA ATACAATGAG GGGGGAAGGG  1140
GGGGTGCAGA GCCCCTCGCT GGGTGGTTTT CCTTCTTTAA ATGCTTTTTT TTTTTTTGT   1200
AATTTTTTTT AATTTTTTTT TTTTAATTTT TCTTAAAAAC CCCAAACCTT TTTCTCCCCC  1260
CCCCCCTTTT TTTTTTTTTG GAAAAAATCC CACGAGTCAG GAGGAAAAAA AAAAAAAAAG  1320
CCAACCCTAA CACAACAAAC AGTAAACCT GCTGGGGGGC ACCGCCGACC CCCCCTTGTC   1380
CGACCCCACA GCCCCACACT GCCCTGGGGA CGCTCGGGGG CCTCCGGTCA CACCGGGACC  1440
CCCAGCTGAG TCCATGGGGC GTCCCCTGGG CTGCTGGGGG GCTCTCGGTC TGCTCCATGC  1500
CGGCCCGGTC CTGCAGAGCC GCTCGGGATG CTGCCCCATG TGGTGCTGTG GGGTTTAACC  1560
CGAATCCGAG TCGCTGGTGT CCGAGGACGA GGAGCTGGAA CTGGAGCTGC TGGAGTCGGA  1620
GCTGGAGCTG GAGGCGCTGA GCCGTGAAAC AGCCACCTGC TGTGCTGACT CGGGCTTCTC  1680
GTTGGCTGCA ATGGGACAAC ACTGCGCTCA GCATCACCAC AGATCACACC CCAATCCCAC  1740
TCCAGACCCC ACACTCACCC TTTTTGGGG GTTTCTTGGC TGAGTTGAGC TGCCCGCTGA   1800
CGTCCTGCAG CCGCTTCTCC AGCTCCCGCT TCTTCTCCAG CGCCAGTTCT TCTTTCGTCT  1860
TCCCCACCGG CTTCTTCATG GCTGTGAAAT TCAGGTTCAG CCCCACACCA TCCCACCTCC  1920
ACCCCAGGGC CGCCCCCTGA ACGCAGCCCC CCACTCACTC TCGCTATAGG GTTTGCGGGG  1980
TTTCTTCCGC AGGCAGGACA GCACGTAGCG CTCCAGCTCA CGCAGTGTGG AGGGTTTGAG  2040
GGTCTCGAAG TCGATCTCGA TCTCCTCGGG GTTGGAATCA CGCAGTGAGG GCTCCCGGGA  2100
CTGGATGATG TGCACCACAC GGCCCAGCTT CTCCCCGGGC AGTTTGTTGA TGTCCAGGCT  2160
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AGGCGGGCAT GGGGAGCAGG CACAGGCAGC AGCACCGGCC CAGCTCCGGC CCTCACCTGC  2640
TCCTGCAGCT CTGCCAGGCG GTTGGCACGT TCCTCTTCCG AGTCAGAGCT CTCCTCGCTG  2700
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```

Figure 34a

E1REV.txt

```
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TCAAAGACAT CCTGAGAGAG AGGACACAGA GGGGTAAGCT GACTGGGCTG GGGGTTACGG   2940
GGCTGCTGGG TGACCCCACC CACCTGCAGC TTGCGGGCCA TGGCCACCAC ATCGTGGTCG   3000
GGAGGGTTGT ATTTGTAGCA GTTGGAGAAC ATTAACCGGA CATCAGCGGC AAACTCCTGT   3060
GCGTCATGGT AGTCCCGGTT CTCCATCTTC CGCTGTGGGA AGGGAAGGC GTGAGCAGAC    3120
CTCAAAGCCA CCCCCACAAA GCCCCCATGA GGCTGTGCCA AGGCCCACGG AGTCCCCAAG   3180
CGAACCTTGA TGGTGCTGAG GTCCATGGGG TGTTTGATGA TCTCGTGGTA ATCGTGCAGC   3240
CCCAGCGCCG AGGCATCGAC CGGCTTGTAG AAGGGCCATG CGTAGGCAGC GTGCTTCTTG   3300
GAGAGCAGCT CCTTCAGAAT CCCATTGCAG TATTTGAGCT GCTCCGACAA TTTGCCCTTT   3360
TTGGAGGTCT GATGCTGCTG GGAATCCGGC AAGTCCTTCT TGGGGGGTTT GATGGGGCGG   3420
CCGCTCTCAC GCCGTGCGGG AATTTTGGCC GCCTTGGCCT CCAGCAGCGT GGCTGACGGG   3480
GAGGATTCAC CGCTGGTGGC TATGATGGCG GTGGTGGTAG GGGTGGTGGT GTCTGCTTTC   3540
CGCTTCACAC CCTTTTTCTA CCAAAATACA GAAAGGTTGA TGAATGGGAG GCCCAGCACA   3600
GCCCACAGAG CCTCCTCCCG TGAGCGAAGA GCTCCCATCT CCCACCTTGG CCACGGGTTG   3660
GGTGGGCGCA GGCGCAGTCA GCACAGCCGG GGCAGTGGAG TGCAGCGACT TGAGGAGCGG   3720
AGCGGAGATG ACGGACGGGT GGGGAATGTT GACAATGGTG GTGGCGATGT CGGGGCTTGG   3780
GGTGTACACA GCGGTGTGGG ACACAGAGGA GACAGCTGGC ACTTGCTGAG CCGCTGTGAG   3840
ACCTGCCAGG AGCGCTGCGG ACAGGCAGAA CCCCCATTAG CACCAAGGTA CCTTCAGTGC   3900
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ACAGGGACAA CCGAAACGTC ACAGGATGCA GAGATGGCAT CAAAGGCCTC AAAGCATCCA   4140
TGCTGCAGTC CTCACCTTGT TATAGATATA GCAGTTTGTG AACATGGTGT TGAAGTCCTG   4200
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GTCCATGGGC TGCTTGATGA TCTTGTGGTA ATCCTGCATA GGGGATGGAC AGTCAGCGCC   4320
GTGTTGGTAA CCACACTGCA CCCCTCCCAG CCCCAGAAGC AGTGGTTTGG GGTTTTTAGG   4380
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CTACGCTATA GGGACAGCCA AAACACTGCT GTCCACAGCA TGAGGTGCAA TGGGGGCCAC   4620
TAATGCTAAA GTAAGAGCAA ACCTATGTGG AATTTACCTC TGGGCTTTAA ATCCTTGGGC   4680
GCCACAGGTA CACAGGGGGC TGGCGTTTAA TATTGGGGTC ACAAGATGTC TTCTACAAAT   4740
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GGGTTCCCTC TAGAGCAGCT GCGTCACCTC ACCCATACCC GTGCGGTGGC ACTGGGAGGG   4860
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GGAAAGGCCA AGCGAACTGG TGCTTCCACA GGGCTTTCAT CACCACTTTG TGCAGGTACT   5220
GCAGCTGGTT GGTGACCCGG CCGGGCTTTT TGGGGTTCGA GACCTCTGGC GGAGGGGGGT   5280
TCGCCTGGGG GGTCTGTAGG GCCGGCACCG AGGCCATGGT GGGGCTCTCG AAGCCCTCGT   5340
AAAGCAGCGA GGGTTTGCGG ATGCGTTTGC CCGGGGTCGA TTCCGTCGCC AAACCCATAA   5400
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```

Figure 34b

E1REV.txt

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AACACTGTGG CCCTCAGCTG GATACACAAC AGTGGGCTCC AAATGTCTGG GGACGGGGGC  5700
AGAATTATTT AAGTGGGGAA AATGAGGATT TAAGCAGCTG GGAGAGGTGG GATGTCTGCA  5760
GCGTGAGGAG AATTTGTCAC CGGGAAAATA CGGTGAATGT CGAGCACTGG GGCTGCTTTC  5820
TCAGGCAGCT CCCAGGGTGT TCCCCATCCT GCCAAGGACG TGGTGGGAAT GACAAGGAAG  5880
GAAGGTGACA GAAGGACACA GCGGCCCCAG TAGTGGCGGT ACAGGGTGGG AGGACACGGT  5940
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TGTGTCCCTG CATCCCTGAC AGAATTCACA TGGACCACGG GGCTGCCGAG TCCCAACATC  6180
CCTGAAGGAC CCACAGAAAT GGGAAGTGGA TAAATGGGAA CAAGCAGCAG ATCAATGGGA  6240
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CACACTGCAC CCTAATCCCT GGGCAATGAA GGGATAGCAG CAGGGAACCA CTGTGTCCCT  6360
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CTTGAGTCCC TGTCCCTAAA AATCTGTAGG AATGACTCTG TGCTATGCAC CTCCCCGTGT  6540
CCCTGTTAGG ATCCATGGGG ACAGCAGGCT GCCAGGTCCC CTGTATGATC CACAGCCCTA  6600
AAAGCAGCTT GGTCAACAAA TGGGAGGGAA CAGCGGGTCC CTAAAGAGCG CCAGGTCGCC  6660
ATGTCCCTGT CCCCAAAGGA CCCACAGGTA CAAGGAACGA ATAAACAGAG ACAAGGAGCA  6720
CTCAGTGGGA TACAACTGAT GTCAGGTGCA GAGCCTTTGA ACACAGAAGC CCCATCTCCC  6780
CATAGGATTC AGGTCCCCAT GCCCCTGTTG GAACCATGGG GACAGGGAGG CTGATGGATT  6840
CCCTGCAGGA CTGAGTTCCT GTGTCCCTGA CCCCGAAGAA TCGATGGGGA CAGAGAGTAG  6900
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CCGTGGGGCT GCCAGGTCCC CACGTCCCCG TCCCCAAGCA ATCGATCCAC GGGGATGAGG  7020
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CGGGACGCGG CAGCCCCATA CCGCCGTCCC CGCAGCAACG CCATCCCCGG TTCATAACTG  7140
CCAACACCCC ACAGCCCCCC CCGGCCCCCA TTCCTGCCCC TCATCACCTA CTTGCTCTGG  7200
GGATTCACAT TCTGCAGCAT GCCGGCGGCT GCGTGCCCGG CCCTGGCTCC CGGCCTTCCT  7260
CCTCCACCTC CTCCTCCCGC CGCCGCCTCC TCCGACGTCC CCCCACTTT GCCCACCGAG  7320
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CGCCGCGCGC CCTCACATCA GCGGAGAAAA TGGCGGCGGG GCCTGGATGG AGAGGGGGGA  7440
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TGGAGCCGTC CGGGAGCGCG AAGGCGGGGG CTGGGCCCGC CCGGTGGAGG ATGGAGGCGG  7740
ATTGGGGCCG CCCCCCAGCG CGCGCCGAGC CCGACCCGCA CCGTCCCTTC GTCCCCACGA  7800
AATGGCGCCG CTCGGCCTGC CCCCGGCCGC CCTTATATAG ACACCACCTG GGTGCTGATT  7860
GGTGGGTGGA CGCGCTGACG TCAGCCACCC GCTTGCACCC GCCCTGCCGC TGCCTCATTG  7920
GACGGCGGTG CTCACCGCGC AGCGCTCCTC TTGGCCGCCC CGCACGCCAC TCACCCGCGC  7980
CGCTCCCCCC CCGCCCTTCC GCCCGGTACT GCGACGGTCA TTGGTCGGTG CTGCCATTCC  8040
CGGCGCGGCG ATTGGCCACC ACGGATCACG TGAGGCGGGC GCTGTTGGCT GTTGTTGTCG  8100
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Figure 34c
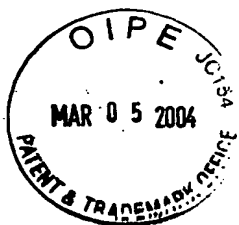
E1REV.txt

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GCTCAGCAGA CCCCAGTCAG TCCCTACGGG GCTCGTGAGG CTCTCCCAGC CGACAGCGGC  8280
CATCGGGCAG CGGAGCCGCG GCGGTCCGCG AGCCGCGGGC TGAGCTGTGG TGAGGTAGTG  8340
AGCTGGGTCC CGGGGATCCT GAAGGGTCCT GAGGTAATCG CGGCCCTCAG CGCGGTCCCG  8400
GGGCCTTCAG TGCCACCCCA CGGTGGTACT GGGGCCCTCA GACCGTCCCC TCCCCACTG   8460
CCACGGCGAT CCGGAGGGGG GGGGTCCGAG GCCGCCCCGT GTCTATTCGG AGGTGCTCTG  8520
TGCTCTTCTT CCCCACGGCA ATTCTGGAGG GCTCACAGCT ACTCCAGAGC AGCCCCATAA  8580
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AATCCTGAGA AACTCAGTGC CACCCCACAG CCAATCCCGG GGTGCCCCAT TGCCTCTCTA  9060
AAGCCTCCAC CCCAATCCGG GGGTGTTCAA TGCCACCCCA CAACCCCCCT CAAAGCACTC  9120
CTGGATACCC CACGGACACC CCAACGCCCT AAAACAAATC CCAGGGCGCT CAATGGAACC  9180
TCCCGCGCAA CCTCGGGCTG CCCCACGCCC CCTCCAACTC AAGCACGACC CAGAGACCCC  9240
CCTTTTCTCC CAACCCCTCC GGCCCCACAC GCCAAAGGCT CTCAAAGACC CCCCCCCAGC  9300
GATCCCGGAC CCGAACAGGG CTTTGGGGTC CCCCCCACGG CGCTCCCGGT GCCGCCCCCC  9360
CCCGCCCCGT GACACAGCAC TTTGGATCCC CGCGGGCCCT CCCCGCCGCC GCCCCGCGC   9420
GAACACCCAA ACATGGCGCT TTTCGCCCCA AAAGCGCCGG GCACAAAGCG GCGCCGCCCA  9480
TTGGTCGTCT GCCCGCCGTC CTCGCTTCCC ATTGGCCCCT TCGACGGCGG AGGGGCGGAA  9540
CCAGATTTGA TGGACAGCTC ATGCTCACGT GTCCTCCCCC CCCCCCGATT GGGTCTTTTT  9600
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TGAGCCGCTC CCACGCAGGG CCACGACCCC CAACCCGATA TCATCCTCGC GTCGCCCCCT  9720
TAAAGCCCCG TTTTTGGGGC AAAAAATCAA AAAAAACATC CCAGGGCAGA AAAAGGAGCC  9780
ACGCGCTACG TCAGCTGCAC CGTGATTGGC CACCCGCCGT CACGTGACGG CCCCGCGCCA  9840
CTCCGACGGC CCCATTCATG GAGCCCGGGC GGCTCCGCGG GGTCCTATCG CCGCTCCGGA  9900
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TGCAGCCATG AAGATTCACG GCATTGTAAG TGTGCATCTG TAGGGGCCCC TGGCATTGCA  10080
AGTGTGCACC TATGGGAGTG CCCGGCATTG CAAGGGTGCA CCTCTGGACG CGTTTGTCAT  10140
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TCCCTCACAA AAACAAAATC CGCGCCGTGA TGAGACACCC CAGAGATCTA CGGAGCCTAC  10680
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ATTACAGCGT CGGGGCTCCC CGCTAGTTTC TTCTATCTAG TAACAAGTGA CGCAAGGTAA  10800
CTGCGGAGCG CGGCCATTGG TTGAGCCGCA CGATCATCTC CTGTCACAGC GCTGGTGTTC  10860
```

Figure 34d

EIREV.txt

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CCCGCAGATC TGTTCTGCCT AGCAACCGAT GACGCGTAAA GCCGCGAGGC ACGGCCATTG   10920
GCTAAACTGG TTGCCGGTAG CAGAGGGATG GGGGCTGCGA GCGGGCGCGG GGCGCTCGTG   10980
GCAGCGCTGC TGGGGGCGGC CCTGGGGAGC GTCAGAGCCG GTAGGGGACG AGGGCGGGGG   11040
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Figure 34e

MAR 0 9 2004

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Figure 34f
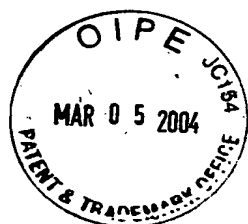
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Figure 34g

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Figure 34h
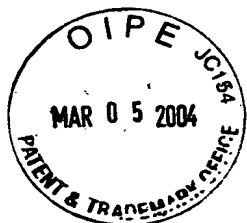
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Figure 34i
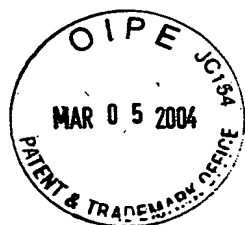
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TCATATTCCC ATGACCTGCC ATCTCCACAC CATTATGGCC TCCAGCCCGT TGGCATTCTG   25020
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TCACACATAG GGAATAATGA GCACATGGCA CGGATGGTGG ACGCATGGAA GGGGCATGGG   25620
GCACGTGGAG GGACAGCGGT CACACAGAGG GGACAACAGC AGGAGGATGG TGGGTACATG   25680
GAGGGGACAG TGGGCACATG GATAGGGCAA TGAGTACATG GTGGTGACAC TGGGCACATG   25740
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ATCCCGCGTC ACCCGCATGG CCACATCCCC TGCCGGGTGA CAGCGCCGTC AGTGCCACCC   26040
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GCCTATACCC ATCCTTACCC CCACCCCAAT CCCCATCCCA TTCCCCATCC CATTCCACGG   26940
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Figure 34j

E1REV.txt

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Figure 34k

E1REV.txt

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GCCCTGGGGC AGGTGGCACT GGTGGGGCAG GAACCCGTGC TCTTCTCTGG CTCCATTCGG  30240
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Figure 34*l*
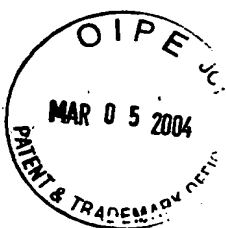
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TGAGGATTGC AGAGGCAGCT GGATGGGCGG GGGGGGAGGG CAGAGAAGGA AATAGGAGTG   32640
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Figure 34m

E1REV.txt

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Figure 34n
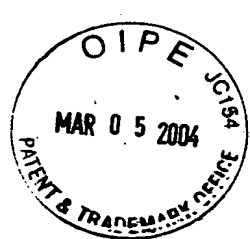
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Figure 35

E52FOR.txt

E52REV.txt

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CAGCCCCATC CCCAGCCCTG TGCTCAGTGT CCCTTCGACT GGATTGGATT CAGAGGAAAA   420
TGCTACTACT TTTCAGAGGA TGAGAGCAAT TGGACGAGCA GCCAGAACAA CTGCTCTGCT   480
CTTGGTGCTT CCTTGGCTGT GTTTGACAGC GCTGAGGACT TGGTGAGGGG GACACAAAAG   540
AGCCACCAAT GTATTTTGTC CGCTTGAGGG CCCCTTGGCT GCTCTTTCAG TGTTTCCTTT   600
CTGATTTTGG GGTGAGGAGG TGGATAATGG TTGTCCTGAG GGTAGGTTGG GTCTACTCCT   660
CAAAATTCTT CAAGGGATTT AAGGGAAAAA AAAGATGTTT TTTCTATGAA GTAACCACGC   720
TGGCTTAGAG ACTGTGAGCT TTGGTGATGG ATTGGGCAGT TTCAAGCACT GAGATTATTG   780
GTTGAAAGGG TTCTGCAGGC AGTGGCATGC AGGAAATGTC CCAGAGCCCC ATGATCTGTT   840
CCCTCTCCTC TTTTCCAGAG CTTCACAATG AGACACAAAG GCAGCTCCCC CCACTGGGTT   900
GGCCTCTCCC GGGAAGGCAA AGAGCATCCA TGGGAATGGG TGAACCGCTC TCCTTTGTCT   960
CACCTGTGAG TTCCCATCCT TGTCTTGGAG GCTGCAGCTT CTCCAGCCCC AAAATGTGGA  1020
TTTCTGGACC TCGGGAGCAT TTCTGGAGGT GGCTTATGGG GTGAGGAGAT GTGGGGAAGG  1080
CACTTCGCAC CGCTTTGGGT CATAGAAGTT CATTGAGAGG CAGAAGTGGC GCAGGAAAAA  1140
GAGATTCCTA TTTAATCAAT TATTTTGTCT GTTTGATTTC ACCACTGTGA TTTCCTCTTC  1200
CCCCCCCCCC CAAACCTGGG GTCTGCCTGT CCGTCTGTCT GTCCATCCAG GTTCCAGGTG  1260
CAAGGCGATG GTCTCTGTGC ATACCTGGGG GATGCCGGGC TCAGCTCCTC CCACTGCAGC  1320
ACGCGGAGGA ATTGGGTTTG CACCAAACCC GCGTTGCAAA AACCGAGGAA GAACTTCTGC  1380
ATCAGCACCT GAGCGGCTCC CGGACCCGAA CACGCGATGC AAGAGGAGGA ACCCAAAGCA  1440
AAAGAGCTCC GCTTTCAGCT GTGCTCAGTA GCAACAGGAG GGCGGTGCGC TCCTCCAGCC  1500
CAGGTCCGAC AGTGCCGCCT ATGGGGCTGC GCGGACCGAA GCAAATCCCA GGCGGAGCTT  1560
CGGCTCCAAA TTACATTTTT TTGCACCGTC TGACTCCTAA TGACCGCTAA AATCCCAATT  1620
TTGGGGGCTA TCCGTGCGCT GCTTGCAACG ACCTTCACCC CTGCGCGATG CAGCAGCAGG  1680
TTTGGGGGGC GGACGGTGGG AAAAATATCCA TTTTTCACCG GTTTTTCTCC AAAGGGAAAT  1740
ACTGGGAAAG CAATCAGCCC AAAGGACCCT GAAATCGATG AATAAATCGG CAAATTATTT  1800
ATGTTTCGTG TTTTCCCTTC TGTGTCACTG CAGTGCGTTC TCCATGAATT CACTTTTAAC  1860
GGTGTTTTGT CACAGGAAAC ACTTCTTCGA CTCTCTCCAC CACTCCTATA TATTCAACAG  1920
ACCAATTCCT TCTGGTGATT TTATGCAAAA ACAAAAGAGT ATATTTGGTT AAAGAACCCA  1980
AACCACCTTC TTGTACTGAA GGGAATAGAA GAGCACAGAC CGCCCGCTCC CCTCCCCTGC  2040
TGCCGCACAA CAGACGGTCC CCGAGGATGT GCAGACAACG CGACGCCGTC TGA          2093
```

Figure 36
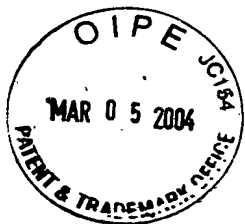
E6G2N15.txt

```
TAGNAACTAG NGGATCCCCC GGGCTGCAGC TATGGGGGAG TGGGTGCACT CCTTGGCCAT    60
GGCTTTGGGT CCCGTTACTC TGGAGGAATT TCCACAGCTG CCCCAGGAAT CTTGTACATA   120
AAAGTGCACA GATCGATCAG AGATGTCATG TTCCTGACAG AAGAAATCCT GTCTCTTCTG   180
ATGTTCTCTG TGAAGAGCAT TGCCACGAGG GAGCTACCAG CAGGGCAAGC AGAGAAATTG   240
AAGAAAACGA AAGATGGGTC GAGGTACGGG ATTGGGCAGG TTTCACTTTC TTTAGCAATG   300
AGACGTGTCA AGCTGGCAGC TTCCCTGGGA GCCTCTCTGG TGTGGATCTC CGGTGGCCCT   360
AAACCTGGTT CAGGCACTGA TCAAGGAGAC ATTACCCGTC TTGGTTCATC TCGGCTCACG   420
G                                                                  421
```

Figure 37
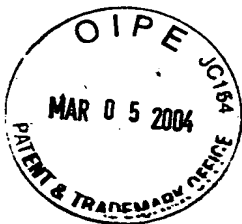
F12FOR.txt

```
CGATGGTCCT  CCAATGACCT  CCATGGTCAT  CCAGTGCTCA  TCCCGCGGTA  TGGCCATGGT   60
AACCCCATGT  TCACCCTGTG  GTCTCACCCC  AATGATGCCG  TGGTTACCTT  TTCGTTACCC  120
TATTCTCATC  CCATATCCCC  CCTTTCTGTC  CCTCTGCCCC  TTCATGATCC  CCTCATGGTT  180
AACAGACGTT  TCCCTCTGCG  ATCAGGTCAT  GTTCAGCACA  AATTCCTCCA  GGGTTCCCTT  240
TATAGTGACC  TCACCATTAC  CCAATCATGT  CCCCGGTGTC  CCTGAAGGGG  CCCAGATTTC  300
CTCAGTGGGA  CCCAGATGTC  TTCAGTGGGG  CGGGACCTGG  CCATTCCCAA  TGTCATCCAG  360
GTGTCCATAT  GGCATGGGAC  ACAGATGTGC  ACATGGGATG  GGACCCAGGT  GTCCCCACTG  420
TCATCCAGAT  GCCTCCATGG  GTTGGGAAAT  GACCATCCTC  GATGTCACCC  AGATGCCCAC  480
ATGTGATGGG  ACGTGGCCAT  CCTTCATGGC  ATCCCGATGT  CCAGCTTGGG  ATGGGATCCC  540
AATGTCACCC  AATGCAATCG  CAGTGTCACC  CAGATGTCCA  CAAGGGATGG  CACCCAGATG  600
TCCCCAGGTG  CCACTCATCT  GCCTCACCAA  CCCAGGACTT  CCTCCCACTG  CTCCCACTGC  660
TCCCAGTTTG  CCCCCATTTC  TCCC                                           684
```

Figure 38
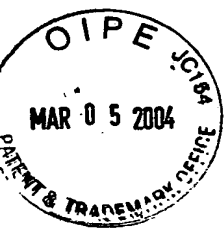
G2M13.txt

```
GATCTTCAGT GATTTTCAGT GGTCTTTGGT GGTCTTCAGT GCTCTTCGTT GGTCTTTGAC   60
AAAGATGCAG AGGAGCACCG CTCCCAGACG GACCCCCCGG GGACCCCATT TGTCGCCATC  120
CCCACTGGGA CATGCAGCCA TTGACCACAG CCCTCCGGCT GCGACCACCC AACTGATTCC  180
TTATCCAAAG TCCACTCTTT GCACACTTAC CTCCAATTTA GTGATAAGGA TGTGGCGTGG  240
GACCGTCCCA ATGGCCGCAC ACAAGTCCAG GTAGATGATA TGGGATGACC ATGAAGGGAT  300
CACAGAGAGG AACACGGGGT GACCACGAGG AGCAACGAAG GAAACGCTGA GTGACCACGG  360
GCAGAAAATG GTGTGACCAT TAGGGGACAA CGAGAGGGAA CAGAAGTAGT AAGGAGTGAG  420
AATGGGGTGA CAAAGAGGTG ACCATGGCAT AACTTTGATA AGACCATTGG GTGACCGCAG  480
GGTGATGGCC ATACCATGGG GTGAGCACTG GATGACCATG GAGGTCATTG GAGGACCATC  540
GGGTGGGACG AGGGCCGTGG GGACACCCGT GGGGCGGTGG GACGGGGGCA GAGTGTCAGA  600
AGGAGCCCCG CGGCGCAGAA CTCTGCCTGG AGACGGGTGA CGCCGCCCGG CGCCGCCGCC  660
GCTCATTGGC CCTCCCCGCC CGGCCCCGGG CTCGCGGCTG GCGCGGGGTG CCGGGTCCCC  720
CATCGTCCGG CGGCAGCAGC CATGGGGAGC GGGCGCGTCC CGGCGGCGGG GGCCGTGCTG  780
GTGGCACTGC TGGCGCTGGG AGCCCGGCCG CCGCCGGCA CGCGGCCCTC GGGTGAGCTC  840
GGAGCCGCGG CGCGGGGACG GCGCTGCGTC CCCCCCGGAG AAACCCCCGG AGCCCTTCTG  900
GCCGTGCGCA GCGCTCGGGG CTGCGGGGGG ACGGAGGGCG GGGGGGGGCG GCGGAGCCGT  960
GGGGGGCAGC GGGGCCGGGG AGGGGGCGGG GGGTGTGGCG GGGGGCGGCT GTGTGCCCTG 1020
ACCGTGCCCT CTGCCCGCAG CGTTCTTCTT CTGCGGTGCG ATATCCGAGT GCCACTACCT 1080
GAACGGCACC GAGCGGGTGA GGTATCTGCA AAGGTACATC TACAACCGGC AGCAGTTCAC 1140
GCACTTCGAC AGCGACGTGG GGAAATTTGT GGCCGATTCA CCGCTGGGTG AGCCGCAAGC 1200
TGAATACTGG AACAGCAACG CCGAGCTTCT GGAGAACCGA ATGAATGAAG TGGACAGGTT 1260
CTGCCGGCAC AACTACGGGG GTGTGGAGTC CTTCACGGTG CAGAGGAGCG GTGAGTGCCG 1320
CGGGGCGCAG CGCGGACGGA CGGGCAGGCG CCGCGCTCTG GCGGTCGGTC CGCAGCGCTC 1380
CCCCCGTGCC CCGCAGTGGA GCCCAAGGTG AGGGTCTCGG CGCTGCAGTC GGGCTCCCTG 1440
CCCGAAACCG ACCGTCTGGC GTGCTACGTG ACGGGCTTCT ACCCGCCGGA GATCGAGGTG 1500
AAGTGGTTCC TGAACGGGCG GGAGGAGACG GAGCGCGTGG TGTCCACGGA CGTGATGCAG 1560
AACGGGGACT GGACGTACCA GGTGCTGGTG GTGCTGGAGA CCGTCCCGCG CGCGGGGGAC 1620
AGCTACGTGT GCCGGGTGGA GCACGCCAGC CTGCGGCAGC CCATCAGCCA GGCGTGGGGT 1680
AAGGCCCCCG GGCCCTGCCC CGCCGCGGGG GGAGCGGGAG CGCGGCCCCC GGCGCTGAGC 1740
CGCCGCCTTC GTCCCCGCAG AGCCGCCGGC GGACGCGGGC AGGAGCAAGC TGCTGACGGG 1800
CGTGGGGGGC TTCGTGCTGG GGCTCGTCTT CCTGGCGCTG GGGCTCTTCG TGTTCCTGCG 1860
CGGTCAGAAA GGTGAGCGCT GGGGAGGGGG GCTGCGCCGG GGGGGGTCGG GAGCGGGGGG 1920
```

Figure 39

H421.txt

```
GCTCTAGAAC TAGTGGATCC CCCGGGCTGC AGGATTACCA GTGTCCCCAA CTGTTTTTGC    60
CAATCCAAGC CCTGCAAATG TACAAATATA TTAAGTGGTT TCCTTAGTAG ACATCTTTAT   120
ATCTCTCACC AATCATTTAA CGTTAACCTT ACTCTGCTTT CTTCTGTGAA CAGAAAACAA   180
AATCGGAAGC CTCATATACA GGTGTTCAGA GGAAAATAGT AAGTGGTGAT GAAACTTGGA   240
GAACTTGTGA AGTGAAATAT GGGAGCTACT GCCTCTGGAG GGAGGAAAAT AAGGAACCAA   300
TGAAAGATGC CAAGGTGAAG CAAATGAAGG ACCAGCTGTT TGTGGCTAGA GCATACTATC   360
CCAGTATTGC TAAAATGCCT TCTCAAAGCA AGTTGACTCG GGATATGAAA CAGAATATCC   420
AAGAGTTTGA GCGTATTCTT AGTGAAAGTT CTCAAGATGC TGACCTTCCA CCACAGTAAG   480
TTCTCTCCAG TTTGGGTTTA ATCATTTTTG TACTGAAAGT TTAGTTCCTT ACTGGAAAAG   540
ATTTTTGTTG GATTCTAGT CACATGAATC TCTCCTAGTT TGCCTTCAGT TTGCCGGACA    600
TCCCGTTTTC TAGTGGTTTT ACTTGCTT                                      628
```

Figure 40

H4212.txt

```
TAACCATGAG TGATAACACT GCGGCCAACT TACTTCTGAC AACGATCGGA GGACCGAAGG  60
AGCTAACCGC TTTTTTGCAC AACATGGGGG ATCATGTAAC TCGCCTTGAT CGTTGGGAAC  120
CGGAGCTGAA TGAAGCCATA CCAAACGACG AGCGTGACAC CACGATGCCT GTAGCAATGG  180
CAACAACGTT GCGCAAACTA TTAACTGGCG AACTACTTAC TCTAGCTTCC CGGCAACAAT  240
TAATAGACTG GATGGAGGCG GATAAAGTTG CAGGACCACT TCTGCGCTCG GCCCTTCCGG  300
CTGGCTGGTT TATTGCTGAT AAATCTGGAG CCGGTGAGCG TGGGTCTCGC GGTATCATTG  360
CAGCACTGGG GC                                                     372
```

Figure 41
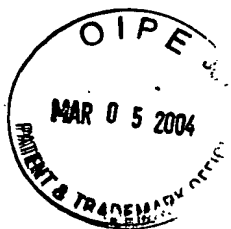
H424.txt

```
TCCCTAGTAA CGGCCGCCAG TGTGCTGGAA TTCGGCTTAG CGTGGTCGCG GCCGAGGTAC    60
ATACCCTGCC CGCAGTGATG TCTCCAAGGT TGATTTAAGC AACCAGCTCC TCCCTGCCAC   120
GGCTCCAGGC TCCACATGCC TGGGTTAAGG CTGGGTTTGT TTTTTGAGAC AGTGTCTTAA   180
CTATGGAGCG CTGACTGTTC TGGAACTCGC TCTGTAGACC AGTCTGGCCT TGAACTCAGT   240
GATCCCCCTG ACTCTGTCTC CAGAATGTGG ATTCTCCCA                          279
```

Figure 42

H4REV.txt

```
GGATTCTGAC ACCCCTCCTC CCCCACCCCC AAAGGTGTTC CAGCGCCGCA TGGATGGGGG   60
CACCGACTTC TGGAGGGGGT GGGAGGAGTA CGTCCATGGC TTCGGGAACG TTTCTGGGGA  120
GTTCTGGCTG GGTGAGGACC CCAAAACTTG GGAAGATTGA GGTCTGGGGT GGGGGGGGGG  180
AACACCCAGG GCGGAGAGGG CTGATGGCTG CAGGACGTGG AGTGGGATCC CTGACGGGGG  240
TGTGGGGTGG GGGGTGTGGG GCAGGGGCCC CAGGTGGGTG TGTAGGGTGG GGATGATGAC  300
GATGGCTGTG GGATGTGGCG CAGGGAATGC GGCGCTGCAC ACACTGACAG CTTCCGGGCC  360
CACGGAGCTG CGTGTGGACC TCTGGACGCC GTCAGACAGC GCCTTCGCCC GCTATCGGGA  420
TTTCGCCGTC AGTGGTCCTG AGGACAATTT CCGCCTTCAC CTCGGGGCCT ACAGTGGCAC  480
AGCTGGTGTG TGTGGGGCAG TGGGAGCTCC TGGGGGATAT TAGGGTTAAC CTTGACCCAT  540
GAGGGGGGCT TTTGGGGATA CCCAGATCAG GGGGGGGGGG AATCCTGGGG AGAGTAGGGG  600
ATGGTCCCTT TGCCCACAGT GAGGGGGCCT TGCCTTGCAG AGGTCTTTAA GATCGTTGAC  660
CTGTTGGGAT CTCTTGGGGA TCTCCAGACT GCAGGGAGCC CCGGGGGTTC TTGGGGGGCT  720
CTGCCCCACA GGGTGGTCTC TGTGAGGGTG TGGGGGTACC TGGGGGGTCT GCGGCTCATC  780
CTTGGGGCTC TGAATGCTAT GTGGGTGTCC TGGAAGGCTC TCTTTAGGGG TCCCCATAAC  840
CTTGCTGTGG GTCCCACAGG GGATGCACTG TCCTACCATG CTGGGAGCCC CTTCTCCACG  900
CGGGACCACG ACCCCCGAGG CCGCCCTCGG CCCTGCGCCG TCGCCTACAC CGGAGCCTGG  960
TGGTACCGCA ACTGCCACTA CGCCAACCTC AATGGGCGCT ATGGGGTGCC CTACGACCAC 1020
CAGGCATGGC TATGGGGGTT GTAAAGGGGT CTGTGGGGAT TGTAAAGGGG TCTATGGGGG 1080
TATAAAATCA ACCCAATGGG ACAGGAGGGG GTCACCATGA GGCCATGGGG GTTTTGTGGG 1140
GTAAATGTGG AGGGCTACCC CCCCCCCAAG GTCCTTTTAG CCCCATGTCT CTCCTGTATG 1200
AATATGGAGC CCTACAGGAG CTGTGGAAGC TGGAACACAA GCTGGAACAG GGAGGGGATA 1260
CTTTGGGCCC CCCTGTAAGG CCTATATGTG TCTATAGGGT CACTGTAGGT TGTTTAAGGG 1320
CATGACCAAG TCCCCCTTCC TTTCTGCAGG GCATCAACTG GTACCCCTGG AAGGGCTTTG 1380
AGTACTCCAT CCCCTTCACA GAGATGAAGC TGCGACCGCA GCGTGACTGA GAGCACTAGA 1440
AAGGTCGTGG GTCGCAGTGG AGCCTTTATG GGGTCAATAA AGCTGCGAGT AGCCAGTGCT 1500
GACCCATGTA TCCCACACAC TGGGCTCAGG AGCTATGGGG GTGGGCAGGG CGTGAGGCGC 1560
ACGCGGAACG GGGCACAGCG CAGCACGGTG CCAGCAGTGA CCCCTAAGTG GGGCAGAGCC 1620
CCATCAGACG GTGGCTCCAG GCGGAATCGC TGTAGGATGT GCCCCAAAAA CACAAAGAGC 1680
TCTGCCCGAG CCAGCGCCTC CCCCACACAC GAGCGTGCCC CACAACCAAA GGGCAGCAGC 1740
GCTCGCCATG GAGCCCCCGG CTGCAGGAAC CGCTCTGTGG GGCAGAACAG AGATCAGAGT 1800
GGGTGTAGGG GGAGGAACCC AGCCTGGGGT TCAAAGCCCA CATCTATGGG GTGGACCCAC 1860
ACATACCGGG CAGGAACTCA TCAGGACGGT CCCAAATCTT GGGGTCGTGG TGCGCAGCAA 1920
AGAGGTTTGG GATAACGATG GATCCCGCAG GCACTGGGAT TCCCGCAATG CTGGGAAGGG 1980
ACAGAATGCT GATAGGATGG ACTGGGAGAG CCTACAGAGG CCAAGTGGGA CATACTGGGA 2040
CCTGCTGAGC TATCCTAGAG CTTACTGGGT GCTTGATGAG TTCTACTGGG ACCGACCTAC 2100
TGGTAGGTCC ATGCTGGTCT GTAGTGGTCC ACACTATTAC AGACTGGTCT ACAATGGTTC 2160
ATTCTAGTGC AAAATACTGA CACGCAGTGG TGCACGGTTC TGCTCGCAGA CATGTGGCCC 2220
GCACTGGTTG GTACTGATCC CCACTGGTCT GTATGGCCCC ATACCAGCCC GTACTGGTGT 2280
TACTGGCTGT ACCTGGAGTG GCGCCGGGCA CAGTGGGGCA GCGCGAGGGG CACGGGGGGT 2340
CGCAGGCGGA GGGTCTCGGT GACAGTGGCA CGGAGCAGTG GCAGTCGCCC CATATCCCCT 2400
GGCTTTGGGG TCCCCCTGGG GCCCAGCACC TGGCGCAGCT CTGCACGTAC CTGGTCCTGC 2460
ACCTGGGACA GGGGACACGT GTCAAAGCAC GTCACCAAGT GCCACATCGG GTCACTTGTG 2520
GGGTGGCCCT CCCCTGCACG GGGACACAGG CAGCAGCGTG ACACGGAAGT GACATGAGCG 2580
TGACATTTTG GCACTGGCCA CAGTGCAGGG GACACCAGGG GCATTATGCA CACAGGGTTA 2640
TGGACATGGA TGTGACATGC ATATGGGGAA GTGCAGTGGA GCTATGGGAG GGGACAGCCA 2700
GGACATGGGT GGGGAGGCCC GAATGGGACC TGGGGAGAAG CAGGTGTGGG TGTGACACAG 2760
ATGTGATGTG GTGTCACCTG GGGGTGGTGC AGCAGGAAGG CCACAGCCCA TAGCAGAGCC 2820
```

Figure 43a

H4REV.txt

```
ACTGCCGTCG TTTCGGTGCC ACCGATGAAG AGATCCACGA GGGCCATGTG CAGGCGGTCC   2880
CCCCCCAGCG GCCCCATAGG GACAGTGGGG TCCCCCCCCA GCAGTGCTCC CAGCACTGTG   2940
TCCCTGGGGG GAGACGCACA GCCCTGTGGG GACACACGTG TTACCCCCTG GGGCCCTGTC   3000
CCCCCCCTGT ACCTGTGTCC CCACGTTCCC CACCTGGTGC CATCGGATCT GGGACTCCAC   3060
AAAGGCATCG CGGCGCTCCA CCAGGCGCAG CAGCTCCCGC AGCCCTGCGT TGGGCAGCAC   3120
CTGTGGGGCA CAGGGACCCC CCCCAGTGCT CCACAGAGCA CCCCTGGACC CATAGGGACC   3180
CCATATTCCC TCCCAGCCCC ATATATAACC CCCCCCCAGG GCGATATAGC CCATCCTTAG   3240
TATAGACCCC TGCAGCCCCA TATGGACCTA TACCACCTCC TCTTATGACT ATATCCCGCA   3300
GCCCCACGCC GATCCTATAT GCCCTGTAGG GCCCTGTAGG GCTCACCCTT AGTGAAGGCA   3360
GCACATCCAG TGCCCGCACA CTGGCCCGGC CCCACACCTC CAGCAGTTCC ACCACACAGC   3420
GCGTGAAGGA GCGCACCTCC GCCTCGGGGG GCATCTGTGG GGCACAGGGC TTGGGGTCAC   3480
CCCAGAGAGA CTCCTGAGTC CCCCCAGAGA CTCCTGAACC CAAAGAGGTA CCGTGGTCAT   3540
TTGGATCCCT CTAGAGGTGA CTGGGTTCCC AAAGGGACAC CTCAACACTT GTGTCCCCTT   3600
CAGGGGCACC TGGATATCTG GGACTCCAAG TGGCACCTGA GCATTGGGA CCCACCCTCC   3660
TTGGACACCT GGGTCACCCC AAGGACACCT GGGACCCCTT CAAGTGGCAC GTGGACATCT   3720
GAGCCCCCTG TAGTGGCACT TGAGTCCCCC TGCTCCCCCA GGTGACACCC AGACCCTGCA   3780
GCCCCTCGAT ATCCCCACCA GGTCCCCGAA GGCAAGGCGG CAGATGGTGC TGCAGGTGTG   3840
GAACGTGAAC GCCTCAAAGA GGTCCACTGG GGCAGCCCCA TAAGAGCTCA ACTCCTGTGG   3900
GGTGAGAAAT GGGGTCACTG AGCGGGTGCG GGTGCCCCAC AAGGGGGGTT GGGGTGAGTC   3960
AAGGGGACGG GCAGCACAGC CCTGGGGCTG ATGGGGTCCA CCTGGGGTTG GAGGGCCCTG   4020
TGTTGGGGTG CTCACCTGGC ACAGCGCCCA GCCCTGCAGC TCCAGGAGGG GCTCCAGGTG   4080
CCTCACAGCT CGCGCCAGTG CTCCCCGCGT TGCCCCCCGC TGCCGTCGCC ACTCTGGGGA   4140
TGCATCCCCC AGCGCCAGGT CCTGCCCCCC CCGCGACACC AGGGACGCTG TGGGGTGACA   4200
CCCATATCAC CCTGGCACCC ATGTGACCTC CGAGAACCCC TCAGACAGCT GTACGGATCC   4260
TTGGGGACAC ATCCAGAATC CCCCAGGCAC CCACTGGGAT CGCTCCAGCA CCCATGGGGA   4320
CTGTTAGAGA TCTCCTCCCC CCCAAAAAAT ACAACCAGAC CCCTTCAGAG ATCATGGGGA   4380
CCCCCCCAGT ACCCCCTCCA GATACCCAAC AGTGACCTAT AGAGACCTCC CTCCACCCAA   4440
AAGCCATGGG GACCCCTCAG GCCCCCCCCC CAGACACCAA TTAGTACCCC CCAGAACCCT   4500
TCAGAAACCT ACAAGGACCC ACCAGAACCC CCTCAGATAC CCATAGAGAT CTTTACAGAC   4560
CTCCTCCTGG GACCCTCCCC AGGAGCACAA ATCCCAAAGA ACCCCCCTTG AAGATTCACA   4620
GGGACCCCCC TCTGACTCAC CCCAAACCCT CATGGGACC TCCCAACCCC TACAGCCCCC   4680
CCATACCCAG GTAACTGTGG GGGCGTCCCA CGAAGTCCCC CCAGCGCCGT GCCAGTGCCT   4740
CACGGATGGC TGCTGCAGAG CTCAGCACCA CCACCTCTGG GGGGGTGGGG GGGGAGGGGC   4800
AAAAAATGAG TGAGTTGGAA GGAAGGGACC CCATGGGGAC CCCAAAAACC AGGGAGAGGG   4860
GAGAGGTGAG GGGTGCCAGA ACGGAGTTGG GGGGGGGGGG GGGAGGGATC CCAAATTATT   4920
TTTTGGGGGG GGGGAGTAGA ATGAGAGGAC AAATTTGAAG GGGAGCAGAA GGGAATTGGG   4980
GGACAGTATG TGGGGGTTCC TCCATCCTCT CAATGGGTAA TTCTGGGGAG CCTGTGAAGT   5040
TGAGGGTCCT AAAGGGGGAA GGCTCAAGGT CCCAGGAGG GAAGGGTTAT GGGGAAAAGG   5100
GGGTAATGGT GGTCCCAAGG GGTATCAGGG GGATGGGGGG GGGGGGGGGT CATGAAGGTG   5160
CCGCCCCTAC TCACCACACC CCCCCAAGCG CAGGCATAAG GGGTCCCCGT AGGTCCGGGC   5220
AAGGATGTGG AGGTGCCGTG GCCCCCCTGG GTGCAGGAGG TGCAGGGCCC CCCCCCACGG   5280
TGCTCCCCCC CGCCTGGCTG ACCCCCCCCA GATCAGAGCC AGGAGAAGTA GCAGCAGAAG   5340
TATCGTCACC GCCATTGTTC TGTGGGGTGG GGGGCCCCAG CTCTGCCCCT ATAACACCTT   5400
ATGAGGAGGA GGTACCCCAA AAGCTCCACC CCCCCACATC CAAACCCCTC CTACCAGAAG   5460
AGGGGCATTG GGTTCACTCC CCTAAAATTA TTGTGTGCCC ACCCCCCTCT TCAAGTCATT   5520
ATAAACTTTA CAGGGGTGTC CTCATAAAAA TACAGGAGTG TGTCCCCCCA CAAAGTGCTC   5580
CCAGAACCAT CGGGTGCCCA TCCCACAAGA AAATCTCTCA AACTCCCATT GTGTGCCCCC   5640
```

Figure 43b

H4REV.txt

```
CAACCAACAA AGATTCCTCA AACTCCCCCC CCCGCCCTCT ACCCATATAT CCTCCCAAGC  5700
GCTCCCCACC CCTCCGCACA CCACCTCCCC AAATCCTCCC CCATTACCAT AATCCCCCCC  5760
ACCCCAGCAG CAGAACCCCA TCACCGCTCT GTGCGTCTGT GTGTGTGAGT AGGGGACGGG  5820
GTGTTTATTG AGGGGAGGGG GGAGGGGGGA GAGCGCTCAG AACCCCTCCC CCTGCAGCCC  5880
CCGCAGGCGC CGTGCCAGCT GCAGGTCTTT GGGGTACAGT GTGACGCGGC GCGCATGCAG  5940
CGAGCACAGG TAGGCGTCCT CCAGCAGGTG CACCAGGAAT GCCTCCGCCG CCTGTGGGAC  6000
CCCGGCGTGG GCGTCCCCAC AAAGCAGGGG GGGAGTCAAT TCCCACCCCC AGGCCACCCC  6060
ACAAATGCCA ATCCTCCAAA ATAATCCCTG GAACAACCCC AAAAAAACCC CTACCCCCAA  6120
CCCCCCTCCC CAAAACCATA ACCTCAATAA CTCCACACCT CAAAAACCTC CAACCCCTCC  6180
AAAACAACCC CCAACCCCGA AACACCTCAC CCCCAAAGAC CCCTTCCCAA GCCCCAAAGA  6240
GACCCCCAGG CACAAGGGGT ACCCCAAAAT CCACTTCCCC CTTCCCCCAA AAAAGCCCTT  6300
TTGGGCACTA GAGAGCTCCC CAGCACCACC CAAAGGGTCC CCCACGGTAT GGGGTACCCT  6360
AAAACACCCC CCAACCCCAA ACCACGGGAA CTTCCAAAAC AAAGCTACCC CCCTCCCCCC  6420
CCCCCCAAAA AAATAAACCC ATAGGGCCCC CCACCTCCTG TAGGGCCAAT AGGGCCATAG  6480
CCTGCCACCT GTAGTCCACG CCCCGTGTGA AGAGCAAGCA GATCTCCCGC ACCTGGGGGG  6540
GGACAGGGGG GCATGGGGAC ACTGGGGGGA CATGGGGGGG GGGGGGGGAG GGGGGGGGGG  6600
GGGAGGGGCA TGAGGACATT GAGGAGAGGG AACACGAGGG TGGCACTGCA TCATGGGAGG  6660
TGACGAGGGG GTGGGGGGGG CTCAAGGACA TGGAGGGGGA CACTCA                6706
```

Figure 43c

H6FOR.txt

```
TTGCTGCCTG CAGGTCGATC TAGTGGATCC GCCGCGACAG CGAACAGGCC AGCCAGCTGG    60
TGCAGTATCT TTCCACTTTT TTCCGCAAAA ACTTAAAGCG GCCTTCGGAG TTTGTTACTC   120
TCGCCGACGA AATTGAACAT GTGAATGCTT ATCTGCAAAT TGAAAAGGCG CGCTTCCAGT   180
CGCGGTTGCA GGTCAACATT GCTATTCCGC AAGAATTATC CCAGCAGCAA TTGCCCGCGT   240
TTACCCTGCA ACCC                                                     254
```
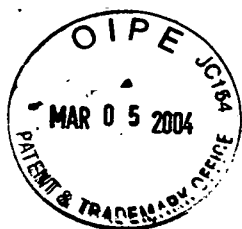
Figure 44

Conti205.txt

```
TGCTGGTGGC GGGGATCTGA CTGGAAATGG AAACGTTCTG TGGCAAAGAG TGGGAATGTA   60
GGAAGGGGGT GGGAGCATGC AGGGTTGGTG GAGCAGGGGG TAGTGATCAG TGGTGAGGAT  120
TTGGTTTCTT GGTCTGAAAT ATGGATGGAA GCTTTGTTGG GAGAGTGAAT GACTTTTCAG  180
TGAGGACAGG TGGATGCTTG GGTGAATGCT TGGTAAGTTG TTGAACGCCT GGATAGTTGG  240
ATGGGTGGAC ATGAACTTTG TATTACAGCT GCAGCTCCAG CACAGAAGGA ACCGCCATCC  300
CAACCACGCC TGGGTGAGCT GACGGCCTCC CACGTCAGCC CCGACTCCGT CCAGCTGGAA  360
TGGAGCGTCC CCGAGGGCTC CTTTGACTCC TTCACGGTGC AGTACAAGGA TGCACAAGGC  420
CAGCCACAGG TGGTGCCCGT GGACGGTGGG TTGCGCACAG TGACCGTGCC CGGGCTGTCG  480
CCGTCCCGCC GCTACAAGTT CAACCTGTAT GGGGTGTGGG GGCGGAAGCG TCTGGGCCCC  540
ATGTCCACTG ATGCTGTCAC AGGTGAGCAT GCTGTTGTGC TGCATCCATG TCTTTTGGCT  600
GACGGTTGTG TTGGCATATG GTAGGAACCT TTCAGGCCCA CTCCTGGTTA CTGTGGTCTT  660
AATAGAGAGG GAAGTTCTTT CCTGTTCTTG ACGTGGGTAG CCTGGAGAGA TGGGAGTATG  720
GAAGATGAGA GGAAGAACGG AATAAGGAAT GATTGATAAT TATTGCAGAA CGGATGGAAG  780
GGAGGATGGA TGGGCGGTGC ATGGGTACAT TGGTGCTTAT AGCAGAGCTG GACGGCTGGT  840
TGTACGTTGG TTTGGTTGTT GAAGAGATGA AGAGTTGGAT GGGCGTGTGC TTTCACTGTG  900
AATTCCTCCC CCTGTCTTGC AGCTCCGGCA CAGAAGGAAC CACCTTCCCA GCCACTCTTG  960
GGTGAGCTGA CAGCGTCCCA CGTCGGCCCC GACTCCGTCC AGCTGGAATG GAGCGTCCCC 1020
GAGGGCTCCT TTGACTCCTT CACGGTGCAG TACAAGGATG CACAAGGCCA GCCACAGGTG 1080
GTGCCCGTGG ACGGTGGGTT GCGCACAGTG ACCGTGCCCG GCTGTCGCC GTCCCGCCGC 1140
TACAAGTTCA ACCTGTATGG GGTGTGGGGG CGGAAGCGTC TGGGCCCCAT GTCCACTGAT 1200
GCTGTCACAG GTGAGCATGC TGTGTTCTGC CTCCATGTTC TTTTGCTTTC AGTGTAGTTG 1260
TCATGTGGCA GGAACCTTTC AGGGCCACTT TTGGTTAATG TTGCCTTAAT AGTCAAGGAA 1320
ACAATTTGTT CTTGTTGAGT GGGAATGCCT AACGGGATGG GAGTTTGGAT GATGAGAGGA 1380
CAAATCTTAT AAGGGATGAT TGATAATTAT TGCGGAACGG ATGGAAGGAA GGTTGGATGG 1440
ATGGAATGGT GTTTGGATAA ATTTGTGCTC AGAGCACAGC TGGAGTGTTG GATGAATGTT 1500
GCTTTGCTTG TTGAATAGAT GGATGTTTGG TTGTGTGGTT GCTTCCACTG AGAATTCCTC 1560
CCTCTGTGCT GCAGCAGCAG CTCCAGCACA AGAGGAGCCA CCTTCCCCAC CACGTCTGGG 1620
TGAGCTGACA GCGTCCCATG TCGGCCCCGA CTCCGTCCAG CTGGAATGGA GCGTCCCCGA 1680
GGGCTCCTTT GACTCCTTCA CGGTGCAGTA CAAGGATGCA CAAGGCCAGC CACAGGTGGT 1740
GCCCGTGGAC GGTGGGTTGC GCACAGTGAC CGTGCCCGGG CTGTCGCCGT CCCGCCGCTA 1800
CAAGTTCAAC CTGTATGGGG TGTGGGGGCG GAAGCGTCTG GCCCCATGT CCACTGATGC 1860
TGTCACAGGT GAGGGCAGGA ATTGGCACCT GTTGGGCTCT GGGTTTGCAG CAGGTAGAAA 1920
TGTAAACGTG GCCTGCGCTG GGGATCTTGT TTTCCCCTGG CAATGGGAAC AGCTGTTGGG 1980
TGCCTTTTTT GGGAAGGATC CCTTAATCGC AGCATGAAGT ATGAATGGAC CAATTGGGTG 2040
TGGGTGGAGT GATGGCTGTT GAGATGAGTT GGTGGCTGCT TGAGTAATTG TCTGTTGGAA 2100
TGGATGGACA GATATGTGAA GGAGTGAAAG GATGGATAAA GTAATTTAGG AATCGGTGGA 2160
TGAAGAATGG GTAGGTAGAC CCTTGGTGAA GTGGTAGAAT GGAAGGATTT ATGAACAGAT 2220
ATGAGTTAAT TCTTGCATCG AAGTAGGTGT AAGTGTCTAT TAGCCTGTTG CACTGAACAT 2280
GCAGTTGCAT AGACAAATGA GTGGGGAGAA GTACGGAGTA AATCCCTGCA TGAATGGTAG 2340
GACAGAAACC TGAATGCCTG GATGCTGGCA GTGTGAAGAA TGGCACTTGG GATAGATGGT 2400
TCGAGTATGG GGTAGATTAA AAGATGGATG GAAAAGAGGA ACAGAGAGAG GGTGATTGGA 2460
TGAATGGATG GATGGTTGGA TGTGACTGAT TGACAGGTAC CAAGCTTTTT CCTGCACTG  2520
TGCCTTCTGT GCTGCAGCTG CAGAAGAGAC GGAGGAGGAA CCACCGTCCC AGCCACGCCT 2580
AGGAGAGCTG ACGGCATCCC ATGTCAGCCC CAACTCCGTC CAGCTGGAAT GGAGCATCCC 2640
TGAGGGCTCC TTTGACTCCT TCACGGTGCA GTACATAGAC GTGCAAGGCC AGCCGCAGGA 2700
GCTGCACTTG GATAGTGGGT CGCGCACAGT GACCGTGTCT GGTTTGCTGC CATCCCACCC 2760
CTACAAGTTC AACCTTTACG GGGTGTGGGG GCAGACACGT CTGGGCCCCA TCTCCACTGA 2820
CACCATCACA GGTGAGGGCC CCTGCCTGCT GCTGTGCTCT GGGCCTTGTG CTTGGCACGT 2880
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Figure 45a

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GGCAGGAGCT GTGCGATGGG CTGTGCTGGT GGCGGGGATC TGACTGGAAA TGGAAACGTT    2940
CTGTGGCAAA GAGTGGGAAT GTAGGAAGGG GGTGGGAGCA TGCAGGGTTG GTGGAGCAGG    3000
GGGTAGTGAT CAGTGGTGAG GATTTGGTTT CTTGGTCTGA AATATGGATG GAAGCTTTGT    3060
TGGGAGAGTG AATGACTTTT CAGTGAGGAC AGGTGGATGC TTGGGTGAAT GCTTGGTAAG    3120
TTGTTGAACG CCTGGATAGT TGGATGGGTG GACATGAACT TTGTATTACA GCTGCAGCTC    3180
CAGCACAGAA GGAACCGCCA TCCCAACCAC GCCTGGGTGA GCTGACGGCC TCCCACGTCA    3240
GCCCCGACTC CGTCCAGCTG GAATGGAGCG TCCCCGAGGG CTCCTTTGAC TCCTTCACGG    3300
TGCAGTACAA GGATGCACAA GGCCAGCCAC AGGTGGTGCC CGTGGACGGT GGGTTGCGCA    3360
CAGTGACCGT GCCCGGGCTG TCGCCGTCCC GCCGCTACAA GTTCAACCTG TATGGGGTGT    3420
GGGGGCGGAA GCGTCTGGGC CCCATGTCCA CTGATGCTGT CACAGGTGAG CATGCTGTTG    3480
TGCTGCATCC ATGTCTTTTG GCTGACGGTT GTGTTGGCAT ATGGTAGGAA CCTTTCAGGC    3540
CCACTCCTGG TTACTGTGGT CTTAATAGAG AGGGAAGTTC TTTCCTGTTC TTGACGTGGG    3600
TAGCCTGGAG AGATGGGAGT ATGGAAGATG AGAGGAAGAA CGGAATAAGG AATGATTGAT    3660
AATTATTGCA GAACGGATGG AAGGGAGGAT GGATGGGCGG TGCATGGGTA CATTGGTGCT    3720
TATAGCAGAG CTGGACGGCT GGTTGTACGT TGGTTTGGTT GTTGAAGAGA TGAAGAGTTG    3780
GATGGGCGTG TGCTTTCACT GTGAATTCCT CCCCCTGTCT TGCAGCTCCG GCACAGAAGG    3840
AACCACCTTC CCAGCCACTC TTGGGTGAGC TGACAGCGTC CCACGTCGGC CCCGACTCCG    3900
TCCAGCTGGA ATGGAGCGTC CCCGAGGGCT CCTTTGACTC CTTCACGGTG CAGTACAAGG    3960
ATGCACAAGG CCAGCCACAG GTGGTGCCCG TGGACGGTGG GTTGCGCACA GTGACCGTGC    4020
CCGGGCTGTC GCCGTCCGC CGCTACAAGT TCAACCTGTA TGGGGTGTGG GGGCGGAAGC     4080
GTCTGGGCCC CATGTCCACT GATGCTGTCA CAGGTGAGGG CAGGAATTGG CACCTGGTGG    4140
GCTCTGGGTT TGCAGCAGGT AGAAATGTAA ACGTGGCCTG CGCTGGGGAT CTTGTTTTCC    4200
CCTGGCAATG GGAACAGCTG TTGGGTGCCT TTTTTGGGAA GGATCCCTTA ATCGCAGCAT    4260
GAAGTATGAA TGGACCAATT GGGTGTGGGT GGAGTGATGG CTGTTGAGAT GAGTTGGTGG    4320
CTGCTTGAGT AATTGTCTGT TGGAATGGAT GGACAGATAT GTGAAGGAGT GAAAGGATGG    4380
ATAAAGTAAT TTAGGAATCG GTGGATGAAG AATGGGTAGG TAGACCCTTG GTGAAGTGGT    4440
AGAATGGAAG GATTTATGAA CAGATATGAG TTAATTCTTG CATCGAAGTA GGTGTAAGTG    4500
TCTATTAGCC TGTTGCACTG AACATGCAGT TGCATAGACA AATGAGTGGG GAGAAGTACG    4560
GAGTAAATCC CTGCATGAAT GGTAGGACAG AAACCTGAAT GCCTGGATGC TGGCAGTGTG    4620
AAGAATGGCA CTTGGGATAG ATGGTTCGAG TATGGGGTAG ATTAAAGAT GGATGGAAAA     4680
GAGGAACAGA GAGAGGGTGA TTGGATGAAT GGATGGATGG TTGGATGTGA CTGATTGACA    4740
GGTACCAAGC TTTTTTCCTG CACTGTGCCT TCTGTGCTGC AGGACTATGG TCATAGCTGT    4800
TTCCTGTGTG AAATTGTTAT CCGCTCACAA TTCCACACAA CATCGA                   4846
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Figure 45b